Optical Engineering
Author Index to Volume 24 (1985)

KEY TO INDEX USE

Each entry includes title of paper, coauthors, code letters (when applicable), and location of the paper in Volume 24. A "See" reference means the person is a coauthor of the referenced paper.

Code letters indicate:

(BR) Book review
(FC) Forum column
(Ed) Editorial
(SC) Short communication
(L) Letter

Aanstoos, James V. See Meredith, Barry D.: 24(1)189-196(J/P1985)

Adler, David.
Solar cell technology: overview (FC) 24(6)SR148-SR150(N/D1985)

Ahlers, K. D.
-; Alexander, D. R.: Microcomputer based digital image processing system developed to count and size laser-generated small particle images 24(6)1060-1065(N/D1985)

Ahlers, R.-J.
White light method: new sensor for optical evaluation of rough surfaces 24(3)423-427(M/J1985)

Albert, Elise. See Smith, Howard A.: 24(2)275-284(M/A1985)

Alexander, D. R. See Ahlers, K. D.: 24(6)1060-1065(N/D1985)

Allemand, Charly D. See Hunter, Gordon B.: 24(6)1081-1085(N/D1985)

Allen, C. See Craig, James E.: 24(3)446-454(M/J1985)

Aly, Maged Youseef. See Strickland, Robin N.: 24(4)683-686(J/A1985)

Angenieux, Jacques
-; Masson, Andre; Rouchouse, Yvon: Aspherics: precision manufacturing by vacuum evaporation 24(3)499-501(M/J1985)

Armstrong, Scott A.
-; Wallace, Nelson W.: Infrared optics (Ed) 24(2)256(M/A1985)

Arnold, Steven M.
Electron beam fabrication of computer-generated holograms 24(5)803-807(S/O1985)

Atlas, R.
-; Kalnay, E.; Halem, M.: Impact of satellite temperature sounding and wind data on numerical weather prediction 24(2)341-346(M/A1985)

Azzam, R. M. A. See Thonn, Tracy F.: 24(1)202-206(J/F1985)

Bachalo, W. D.
-; Houser, M. J.: Optical interferometry in fluid dynamics research 24(3)455-461(M/J1985)

Baker, Max L. See Ledor, Kobi: 24(4)681-682(J/A1985)

Ball, S.
Nondestructive refractive index characterization of optical fibers using phase contrast scanning optical microscope 24(3)518-521(M/J1985)

Bansal, N. P. See Bruce, A. J.: 24(3)522-526(M/J1985)

Barone, F. R. See Milton, A. F.: 24(5)855-862(S/O1985)

Barrett, Harrison H. See Ticknor, Anthony J.: 24(1)082-085(J/F1985)

Barry, J. D.
-; Mecherle, G. S.: Beam pointing error as a significant design parameter for satellite-borne free-space optical communication systems 24(6)1049-1054(N/D1985)

Bartelt, H.
-; Streibl, N.: Three dimensional display based on thick holographic phase components 24(6)1038-1041(N/D1985)

Bartko, J. See Mentzer, M. A.: 24(2)225-229(M/A1985)

Bartlett, Roger J. See Lee, Ping: 24(1)197-201(J/F1985)

Becker, Friedhelm
-; Yu, Yung H.: Digital fringe reduction techniques applied to measurement of three-dimensional transonic flow fields 24(3)429-434(M/J1985)

Beckmann, Leo H. J. F.
Programmable calculators: their use in lens design and analysis 24(4)713-716(J/A1985)

benAvi, Doron. See Ledor, Kobi: 24(4)681-682(J/A1985)

Bendow, Bernard
-; Rast, Howard; El-Bayoumi, Osama H.: Infrared fibers: an overview of prospective materials, fabrication methods, and applications 24(6)1072-1080(N/D1985)

Bennett, Jean M.
Measuring roughness of optical surfaces: comparison of techniques for 24(3)380-387(M/J1985)

Benton, Stephen A. See Haridas, P.: 24(5)741-745(S/O1985)
-; Duston-Roberge, D. A.; Simard, R.: Achromatic holographic stereogram of Landsat multispectral scanner data 24(2)338-340(M/A1985)

Bergen, G. J. See Spencer, R. S.: 24(3)548-554(M/J1985)

Bertollini, Gary P.
-; Oberdier, Larry M.; Lee, Yong H.: Image processing system to analyze droplet distributions in sprays 24(3)464-469(M/J1985)

Besalich, Philipp W. See Carlsohn, Matthias F.: 24(4)655-662(J/A1985)

Bickel, G.
-; Hausler, G.; Maul, M.: Triangulation with expanded range of depth 24(6)975-977(N/D1985)

Bifano, T. G.
-; Dow, T. A.: Real time control of spindle runout 24(5)888-892(S/O1985)

Bjelkhagen, Hans I.
Pulsed fiber holography: new technique for hologram interferometry 24(4)645-649(J/A1985)

Boggess, Thomas F. See VanStryland, Eric W.: 24(4)613-623(J/A1985)

Bouck, James B. See Hoffland, Lynn D.: 24(6)982-984(N/D1985)

Boyd, J. T. See Kosel, P. B.: 24(1)176-182(J/F1985)
-; Wu, R. W.; Zelmon, D. E.; Naumaan, A.; Timlin, H. A.; Jackson, Howard E.: Guided wave optical structures utilizing silicon 24(2)230-234(M/A1985)

Brodmann, Rainer
-; Gerstorfer, Oskar; Thurn, Gerd: Optical roughness measuring

Optical Engineering
Author Index to Volume 24 (1985)

KEY TO INDEX USE

Each entry includes title of paper, coauthors, code letters (when applicable), and location of the paper in Volume 24. A "See" reference means the person is a coauthor of the referenced paper.

Code letters indicate:

(BR) Book review
(FC) Forum column
(Ed) Editorial
(SC) Short communication
(L) Letter

Aanstoos, James V. See Meredith, Barry D.: 24(1)189-196(J/P1985)

Adler, David.
Solar cell technology: overview (FC) 24(6)SR148-SR150(N/D1985)

Ahlers, K. D.
-; Alexander, D. R.: Microcomputer based digital image processing system developed to count and size laser-generated small particle images 24(6)1060-1065(N/D1985)

Ahlers, R.-J.
White light method: new sensor for optical evaluation of rough surfaces 24(3)423-427(M/J1985)

Albert, Elise. See Smith, Howard A.: 24(2)275-284(M/A1985)

Alexander, D. R. See Ahlers, K. D.: 24(6)1060-1065(N/D1985)

Allemand, Charly D. See Hunter, Gordon B.: 24(6)1081-1085(N/D1985)

Allen, C. See Craig, James E.: 24(3)446-454(M/J1985)

Aly, Maged Youseef. See Strickland, Robin N.: 24(4)683-686(J/A1985)

Angenieux, Jacques
-; Masson, Andre; Rouchouse, Yvon: Aspherics: precision manufacturing by vacuum evaporation 24(3)499-501(M/J1985)

Armstrong, Scott A.
-; Wallace, Nelson W.: Infrared optics (Ed) 24(2)256(M/A1985)

Arnold, Steven M.
Electron beam fabrication of computer-generated holograms 24(5)803-807(S/O1985)

Atlas, R.
-; Kalnay, E.; Halem, M.: Impact of satellite temperature sounding and wind data on numerical weather prediction 24(2)341-346(M/A1985)

Azzam, R. M. A. See Thonn, Tracy F.: 24(1)202-206(J/F1985)

Bachalo, W. D.
-; Houser, M. J.: Optical interferometry in fluid dynamics research 24(3)455-461(M/J1985)

Baker, Max L. See Ledor, Kobi: 24(4)681-682(J/A1985)

Ball, S.
Nondestructive refractive index characterization of optical fibers using phase contrast scanning optical microscope 24(3)518-521(M/J1985)

Bansal, N. P. See Bruce, A. J.: 24(3)522-526(M/J1985)

Barone, F. R. See Milton, A. F.: 24(5)855-862(S/O1985)

Barrett, Harrison H. See Ticknor, Anthony J.: 24(1)082-085(J/F1985)

Barry, J. D.
-; Mecherle, G. S.: Beam pointing error as a significant design parameter for satellite-borne free-space optical communication systems 24(6)1049-1054(N/D1985)

Bartelt, H.
-; Streibl, N.: Three dimensional display based on thick holographic phase components 24(6)1038-1041(N/D1985)

Bartko, J. See Mentzer, M. A.: 24(2)225-229(M/A1985)

Bartlett, Roger J. See Lee, Ping: 24(1)197-201(J/F1985)

Becker, Friedhelm
-; Yu, Yung H.: Digital fringe reduction techniques applied to measurement of three-dimensional transonic flow fields 24(3)429-434(M/J1985)

Beckmann, Leo H. J. F.
Programmable calculators: their use in lens design and analysis 24(4)713-716(J/A1985)

benAvi, Doron. See Ledor, Kobi: 24(4)681-682(J/A1985)

Bendow, Bernard
-; Rast, Howard; El-Bayoumi, Osama H.: Infrared fibers: an overview of prospective materials, fabrication methods, and applications 24(6)1072-1080(N/D1985)

Bennett, Jean M.
Measuring roughness of optical surfaces: comparison of techniques for 24(3)380-387(M/J1985)

Benton, Stephen A. See Haridas, P.: 24(5)741-745(S/O1985)
-; Duston-Roberge, D. A.; Simard, R.: Achromatic holographic stereogram of Landsat multispectral scanner data 24(2)338-340(M/A1985)

Bergen, G. J. See Spencer, R. S.: 24(3)548-554(M/J1985)

Bertollini, Gary P.
-; Oberdier, Larry M.; Lee, Yong H.: Image processing system to analyze droplet distributions in sprays 24(3)464-469(M/J1985)

Besalich, Philipp W. See Carlsohn, Matthias F.: 24(4)655-662(J/A1985)

Bickel, G.
-; Hausler, G.; Maul, M.: Triangulation with expanded range of depth 24(6)975-977(N/D1985)

Bifano, T. G.
-; Dow, T. A.: Real time control of spindle runout 24(5)888-892(S/O1985)

Bjelkhagen, Hans I.
Pulsed fiber holography: new technique for hologram interferometry 24(4)645-649(J/A1985)

Boggess, Thomas F. See VanStryland, Eric W.: 24(4)613-623(J/A1985)

Bouck, James B. See Hoffland, Lynn D.: 24(6)982-984(N/D1985)

Boyd, J. T. See Kosel, P. B.: 24(1)176-182(J/F1985)
-; Wu, R. W.; Zelmon, D. E.; Naumaan, A.; Timlin, H. A.; Jackson, Howard E.: Guided wave optical structures utilizing silicon 24(2)230-234(M/A1985)

Brodmann, Rainer
-; Gerstorfer, Oskar; Thurn, Gerd: Optical roughness measuring

instrument for fine machined surfaces 24(3)408-413(M/J1985)

Brooks, Robert E.
Micromechanical light modulators on silicon 24(1)101-106(J/F1985)

Bruce, A. J.
-; Moynihan, C. T.; Loehr, S. R.; Opalka, S. M.; Mossadegh, R.; Perazzo, N. L.; Bansal, N. P.; Doremus, R. H.; Drexhage, Martin G.: Intrinsic instabilities of heavy metal fluoride glasses 24(3)522-526(M/J1985)

Bryan, D. A.
-; Rice, R. R.; Gerson, Robert; Tomaschke, H. E.; Sweeney, K. L.; Halliburton, L. E.: Magnesium doped lithium niobate for higher optical power applications 24(1)138-143(J/F1985)

Burgmeijer, J. W. See vanRenesse, R. L.: 24(6)1086-1092(N/D1985)

Cady, Fredrick M. See Stover, John C.: 24(3)404-407(M/J1985)

Camac, M. See Frankel, Donald S.: 24(6)996-1003(N/D1985)

Carder, Kendall L.
-; Steward, R. G.; Payne, P. R.: Solid state spectral transmissometer and radiometer 24(5)863-868(S/O1985)

Carlotto, Mark J. See Tom, Victor T.: 24(6)1026-1029(N/D1985)

Carlsohn, Matthias F.
-; Besslich, Philipp W.: Adaptive selection of threshold matrix size for pseudogray rendition of images 24(4)655-662(J/A1985)

Carter, G. M.
-; Chen, Y. J.; Tripathy, S. K.: Intensity dependent index of refraction in organic materials 24(4)609-612(J/A1985)

Cartwright, Steven
-; Gustafson, Steven C.: Convolver-based optical systolic processing architectures 24(1)059-064(J/F1985)

Casasent, David P.
Coherent optical pattern recognition: a review 24(1)026-032(J/F1985)
Computer generated holograms in pattern recognition: a review 24(5)724-730(S/O1985)

Case, Steven K. See Jalkio, Jeffrey A.: 24(6)966-974(N/D1985)
See Kim, Richard C.: 24(5)786-790(S/O1985)

Caulfield, H. John. See Frankel, Donald S.: 24(6)996-1003(N/D1985)
See Pryputniewicz, Ryszard J.: 24(4)624(J/A1985)
Automated analysis of particle holograms 24(3)462-463(M/J1985)
New editor for Optical Engineering (Ed) 24(1)SR006(J/F1985)
Of past and future: my last editorial (Ed) 24(3)SR060(M/J1985)
Perfectionist reviewer (Ed) 24(2)SR034(M/A1985)
-; Putnam, R. S.: Fault tolerance and self-healing in optical systolic array processors 24(1)065-067(J/F1985)

Chance, K.
Spectrometric Techniques, Vol. III. Edited by George A. Vanasse. (BR) 24(2)SR038-SR041(M/A1985)

Chang, I. C.
Materials for acoustooptic devices, selection of 24(1)132-137(J/F1985)

Chemla, D. S.
-; Miller, D. A. B.; Smith, P. W.: Nonlinear optical properties of GaAs/GaAlAs multiple quantum well material: phenomena and applications 24(4)556-564(J/A1985)

Chen, Lih-Shyang
-; Herman, Gabor T.; Hung, Hsiu-Mei; Levkowitz, Haim; Trivedi, Sushma S.; Udupa, Jayaram K.: Interactive manipulation of three-dimensional data via two-dimensional display device 24(5)893-900(S/O1985)

Chen, Y. J. See Carter, G. M.: 24(4)609-612(J/A1985)

Chiang, F. P.
-; Li, D. W.: Random (speckle) patterns for displacement and strain measurement: some recent advances 24(6)936-943(N/D1985)

Chung, Hai Bin
-; Lee, Sang Soo: Aplanatic four spherical mirror system 24(2)317-321(M/A1985)

Church, Eugene L.
-; Takacs, P. Z.: Finish characteristics of machined optical surfaces: survey of the 24(3)396-403(M/J1985)
-; Vorburger, Theodore V.; Wyant, James C.: Mechanical and optical measurements of finish of precision machined optical surfaces: direct comparison of 24(3)388-395(M/J1985)

Clymer, B.
-; Collins, Stuart A., Jr.: Optical computer switching network 24(1)074-081(J/F1985)

Coleman, Daniel J. See Magarinos, Jose R.: 24(5)769-780(S/O1985)

Collins, Stuart A., Jr. See Clymer, B.: 24(1)074-081(J/F1985)

Coppa, G.
-; Costa, B.; DiVita, P.; Rossi, U.: Single mode optical fiber characterization 24(4)676-680(J/A1985)

Costa, B. See Coppa, G.: 24(4)676-680(J/A1985)

Cowan, James J.
Holographic honeycomb microlens 24(5)796-802(S/O1985)

Craig, James E.
-; Allen, C.: Aero-optical turbulent boundary layer/shear layer experiment on the KC-135 aircraft revisited 24(3)446-454(M/J1985)

Currie, L. A.
Use of simulation data sets for assessing interlaboratory pattern recognition accuracy 24(6)1004-1008(N/D1985)

D'Amelio, Frank D.
-; DeLisi, Steven T.; Rega, Anthony: Fiber optic angioscopes 24(4)672-675(J/A1985)

Dagenais, Mario
-; Seymour, Robert J.: Nonlinear optical materials, devices, and applications (Ed) 24(4)555(J/A1985)

Dandliker, R. See Thalmann, R.: 24(6)930-935(N/D1985)
-; Thalmann, R.: Heterodyne and quasi-heterodyne holographic interferometry 24(5)824-831(S/O1985)

Davis, Charles M.
Fiber optic sensors: an overview 24(2)347-351(M/A1985)

Dazun, Zhao. See Peiran, Yan: 24(2)SR037(M/A1985)

Dean, A. B.
-; Elliott, C. T.; White, A. M.: Photoconductive detectors employing an optically induced nonlinear resistance 24(4)668-671(J/A1985)

Deason, V. A.
-; Reynolds, L. D.; McIlwain, M. E.: Velocities of gases and plasmas from real time holographic interferograms 24(5)735-740(S/O1985)

DeLisi, Steven T. See D'Amelio, Frank D.: 24(4)672-675(J/A1985)

DelRio, Patrick
-; Kruger, Robert A.: Digital tomography fulcrum height programmer and error correction 24(3)527-528(M/J1985)

Desurvire, E. See Pocholle, J. P.: 24(4)600-608(J/A1985)

Detrio, John A.
-; Miner, Susan M.: Standardized total integrated scatter measurements of optical surfaces 24(3)419-422(M/J1985)

Deuto, B. See Geary, Joseph M.: 24(2)332-337(M/A1985)

DeVelis, John B. See Reynolds, George O.: 24(5)757-768(S/O1985)

Dewan, E. M.
Deconvolution with Applications in Spectroscopy. Edited by Peter A. Jansson. (BR) 24(4)SR096-SR098(J/A1985)

Ding, Kurt.
Test of jet engine turbine blades by thermography 24(6)1055-1059(N/D1985)

DiVita, P. See Coppa, G.: 24(4)676-680(J/A1985)

Dixit, S. See Haridas, P.: 24(5)741-745(S/O1985)

Djeu, N.
Multiphoton Spectroscopy of Molecules. By S. H. Lin, Y.

Fujimura, H. J. Neusser,and E. W. Schlag: edited by Paul P. Liao and Paul Kelley. (BR) 24(2)SR033(M/A1985)

Doremus, R. H. See Bruce, A. J.: 24(3)522-526(M/J1985)

Dow, T. A. See Bifano, T. G.: 24(5)888-892(S/O1985)

Drexhage, Martin G. See Bruce, A. J.: 24(3)522-526(M/J1985)
See Schroeder, John: 24(4)697-703(J/A1985)

Dudderar, T. D. See Gilbert, J. A.: 24(4)628-631(J/A1985)

Dumbaugh, William H.
Infrared transmitting glass 24(2)257-262(M/A1985)

Duncan, M. D.
-; Reintjes, J.; Manuccia, T. J.: Imaging biological compounds using the coherent antiStokes Raman scattering microscope 24(2)352-355(M/A1985)

Duncan, S. S.
-; McQuoid, J. A.; McCartney, D. J.: Holographic filters in dichromated gelatin position tuned over near infrared region 24(5)781-785(S/O1985)

Duneman, Dennis. See Geary, Joseph M.: 24(2)332-337(M/A1985)

Duston-Roberge, D. A. See Benton, Stephen A.: 24(2)338-340(M/A1985)

Eagar, Thomas W. See Hunter, Gordon B.: 24(6)1081-1085(N/D1985)

Easton, Roger L. See Ticknor, Anthony J.: 24(1)082-085(J/F1985)

Edgerton, Harold E.
Computers and strobes (FC) 24(2)SR036-SR037(M/A1985)

Efron, Uzi. See Warde, Cardinal: 24(1)092(J/F1985)
-; Wu, S. T.; Grinberg, Jan; Hess, L. D.: Liquid-crystal-based visible-to-infrared dynamic image converter 24(1)111-118(J/F1985)

Efthimiopoulos, T.
Pulse modulation of an excimer pumped dye laser 24(5)906-907(S/O1985)

Egdall, Ira M.
Three mirror wide field optical system: manufacture of a 24(2)285-289(M/A1985)

El-Bayoumi, Osama H. See Bendow, Bernard: 24(6)1072-1080(N/D1985)
See Schroeder, John: 24(4)697-703(J/A1985)

Elliott, C. T. See Dean, A. B.: 24(4)668-671(J/A1985)

Endsley, Neil H. See Mord, Allan J.: 24(3)507-515(M/J1985)

Estler, W. Tyler.
Calibration and use of optical straightedges in the metrology of precision machines 24(3)372-379(M/J1985)

Everett, Paul
-; Hynecek, Jaroslav; Zucchino, Paul; Lowrance, John: Virtual phase charge coupled device imager operated in frontside electron-bombarded mode 24(2)360-362(M/A1985)

Fainman, Y.
-; Lee, Sing H.: Mangin mirror performance for optical processing with feedback: experimental evaluation of 24(3)535-540(M/J1985)

Feigelson, R. S.
-; Kway, W. L.; Route, R. K.: Single crystal fibers by the laser heated pedestal growth method 24(6)1102-1107(N/D1985)

Ferris, Ernest J. See Ledor, Kobi: 24(4)681-682(J/A1985)

Fielding, H. L. See Ingwall, R. T.: 24(5)808-811(S/O1985)

Findakly, T.
Glass waveguides by ion exchange: a review 24(2)244-250(M/A1985)

Finkel, Mitchell
-; Kalshoven, James, Jr.; Leone, Peter; Strange, Maxwell: Optical scanner for linear arrays 24(2)313-316(M/A1985)

Fischer, Jacqueline. See Smith, Howard A.: 24(2)275-284(M/A1985)

Fleetwood, Charles M. See Spencer, R. S.: 24(3)548-554(M/J1985)

Forgham, James L. See Harvey, James E.: 24(1)183-188(J/F1985)

Forrest, S. R.
Fiber Optic Communications. By Joseph C. Palais. (BR) 24(1)SR014-SR016(J/F1985)

Fox-Bilmont, Marsha. See Schroeder, John: 24(4)697-703(J/A1985)

Frankel, Donald S.
-; Camac, M.; Caulfield, H. John; Gozewski, C.; Kolb, C. E.: Spectral correlator technologies 24(6)996-1003(N/D1985)
-; Sindoni, O. I.: Spectral pattern recognition (Ed) 24(6)981(N/D1985)

Fraser, Donald
-; Hunt, B. R.; Su, J. C.: Tomography in image data compression: principles of 24(2)298-306(M/A1985)

Fusek, Richard L.
-; Lin, L. H.; Harding, K.; Gustafson, Steven C.: Holographic optical processing for submicrometer defect detection 24(5)731-734(S/O1985)

Fuzessy, Z.
-; Wesolowski, P.: Simplified static holographic evaluation method omitting the zero-order fringe 24(6)1023-1025(N/D1985)

Garmire, Elsa.
Infrared all-optical information processing in semiconductors 24(4)575-578(J/A1985)

Gaskill, Jack D. See Seeley, Kathleen S.: 24(1)SR008-SR012(J/F1985)
Frequency doubling and other changes (Ed) 24(6)SR146(N/D1985)
Funny thing happened on the way to... (Ed) 24(4)SR092(J/A1985)
Review process (Ed) 24(5)SR116(S/O1985)

Gaylord, Thomas K.
-; Mirsalehi, M. M.; Guest, C. C.: Optical digital truth table look-up processing 24(1)048-058(J/F1985)

Gaynor, Winn.
Categorized Bibliography of Optical Publications. By Douglas Goodman. (BR) 24(3)SR068(M/J1985)

Geary, Joseph M.
Infrared presensitization photography and the characteristic curve 24(4)704-706(J/A1985)
Infrared presensitization photography and spectral sensitivity 24(5)913-917(S/O1985)
-; Vunck, D.; Deuto, B.; Sessions, R.; Duneman, Dennis; Moeller, Charles E.; Wick, R.: Applied infrared presensitization photography 24(2)332-337(M/A1985)

Gelles, Rubin.
Aberrations of the Mangin mirror 24(2)322-325(M/A1985)

Georgopoulos, Chris J.
Interference sources in infrared systems operating in closed spaces (FC) 24(3)SR062-SR066(M/J1985)

Gerhart, Grant R. See Plotkowski, Paul D.: 24(5)754-756(S/O1985)
See Tome, Jay A.: 24(5)879-881(S/O1985)
See Yu, Francis T. S.: 24(5)812-819(S/O1985)

Gerson, Robert. See Bryan, D. A.: 24(1)138-143(J/F1985)

Gerstorfer, Oskar. See Brodmann, Rainer: 24(3)408-413(M/J1985)

Ghosh, Sanjib K.
Image motion compensation through augmented collinearity equations 24(6)1014-1017(N/D1985)

Gibbs, H. M. See Ovadia, S.: 24(4)565-568(J/A1985)
See Peyghambarian, N.: 24(1)068-073(J/F1985)

Gidon, P.
-; Valette, S.; Mottier, P.: Integrated lenses on silicon nitride waveguides 24(2)235-240(M/A1985)

Gilbert, J. A.
-; Dudderar, T. D.; Nose, A.: Remote deformation field measurement through different media using fiber optics 24(4)628-631(J/A1985)

Glanville, R. See Tozer, B. A.: 24(5)746-753(S/O1985)

Glatt, I. See Kafri, O.: 24(6)944-960(N/D1985)

Gold, S. H.
Free Electron Lasers. By Thomas C. Marshall. (BR) 24(5)SR118-SR120(S/O1985)

Goloskie, D. See Haridas, P.: 24(5)741-745(S/O1985)

Gordon, A. L. See Tozer, B. A.: 24(5)746-753(S/O1985)

Goutzoulis, A. P.
-; Kumar, B. V. K. Vijaya: Detector size effects on peak-to-sidelobe ratio in bulk acousto-optic spectrum analyzer 24(5)908-912(S/O1985)

Gozewski, C. See Frankel, Donald S.: 24(6)996-1003(N/D1985)

Granger, E. M.
Photographic Science. By Earl N. Mitchell. (BR) 24(2)SR042(M/A1985)

Grinberg, Jan. See Efron, Uzi: 24(1)111-118(J/F1985)

Gruninger, John.
Generalized singular value decomposition and discriminant analysis 24(6)991-995(N/D1985)

Guerin, Jean-Michel. See Johnson, Richard V.: 24(1)093-100(J/F1985)

Guest, C. C. See Gaylord, Thomas K.: 24(1)048-058(J/F1985)

Guha, Shekhar. See VanStryland, Eric W.: 24(4)613-623(J/A1985)

Gustafson, Steven C. See Cartwright, Steven: 24(1)059-064(J/F1985)
See Pusek, Richard L.: 24(5)731-734(S/O1985)

Guy, J. H. See Mauldin, L. E., III: 24(2)307-312(M/A1985)

Hafen, E. See Haridas, P.: 24(5)741-745(S/O1985)

Halem, M. See Atlas, R.: 24(2)341-346(M/A1985)

Halliburton, L. E. See Bryan, D. A.: 24(1)138-143(J/F1985)

Harding, K. See Pusek, Richard L.: 24(5)731-734(S/O1985)

Haridas, P.
-; Hafen, E.; Pless, I.; Harton, J.; Dixit, S.; Goloskie, D.; Benton, Stephen A.: Detection of short-lived particles using holography 24(5)741-745(S/O1985)

Hariharan, P.
Quasi-heterodyne hologram interferometry 24(4)632-638(J/A1985)

Harlow, Charles A. See Trivedi, Mohan M.: 24(3)502-506(M/J1985)

Harton, J. See Haridas, P.: 24(5)741-745(S/O1985)

Harvey, James E.
-; MacFarlane, Malcolm J.; Forgham, James L.: Design and performance of ranging telescopes: monolithic vs synthetic aperture 24(1)183-188(J/F1985)

Hausler, G. See Bickel, G.: 24(6)975-977(N/D1985)
-; Maul, M.: Telecentric scanner for three-dimensional sensing 24(6)978-980(N/D1985)

Havener, A. George
-; Obergefell, L. A.: Computational interferometric description of nested flow fields 24(3)441-445(M/J1985)

Hayashi, S. See Nakano, H.: 24(1)207-212(J/F1985)

Hentschel, W.
-; Lauterborn, W.: High speed holographic movie camera 24(4)687-691(J/A1985)

Herman, Gabor T. See Chen, Lih-Shyang: 24(5)893-900(S/O1985)

Herzig, H. See Spencer, R. S.: 24(3)548-554(M/J1985)

Hess, Cecil F.
-; Trolinger, James D.: Particle field holography data reduction by Fourier transform analysis 24(3)470-474(M/J1985)

Hess, L. D. See Efron, Uzi: 24(1)111-118(J/F1985)

Hill, D. A. See Wuerker, Ralph F.: 24(3)480-484(M/J1985)

Hillion, P.
-; Quinnez, S.: Self-steepening and self-modulation of optical beams in the spinor theory of light 24(1)153-159(J/F1985)
-; Quinnez, S.: Self-trapping using the spinor wave equation: analysis of 24(2)290-297(M/A1985)

Hilton, P. D. See Reynolds, George O.: 24(5)757-768(S/O1985)

Hoffland, Lynn D.
-; Piffath, Ronald J.; Bouck, James B.: Spectral signatures of chemical agents and simulants 24(6)982-984(N/D1985)

Holman, Robert L.
-; Skinner, Doyle P.: Battelle's proposed cooperative program to develop guided wave optoelectronic manufacturing technology 24(2)251-255(M/A1985)

Houser, M. J. See Bachalo, W. D.: 24(3)455-461(M/J1985)

Hovanesian, Joseph D. See Plotkowski, Paul D.: 24(5)754-756(S/O1985)

Howard, James W.
-; Ryan-Howard, Danette P.: Optical design of thermal imaging systems utilizing gradient-index optical materials 24(2)263-266(M/A1985)

Huff, Lloyd.
Applications of holography (Ed) 24(5)723(S/O1985)

Huignard, J. P. See Loiseaux, B.: 24(1)144-149(J/F1985)
-; Rajbenbach, H.; Refregier, Ph.; Solymar, L.: Wave mixing in photorefractive bismuth silicon oxide crystals and its applications 24(4)586-592(J/A1985)

Hung, Hsiu-Mei. See Chen, Lih-Shyang: 24(5)893-900(S/O1985)

Hung, Yau Y. See Plotkowski, Paul D.: 24(5)754-756(S/O1985)

Hunsperger, R. G. See Mentzer, M. A.: 24(2)225-229(M/A1985)

Hunt, B. R. See Fraser, Donald: 24(2)298-306(M/A1985)

Hunter, Gordon B.
-; Allemand, Charly D.; Eagar, Thomas W.: Multiwavelength pyrometry: an improved method 24(6)1081-1085(N/D1985)

Hynecek, Jaroslav. See Everett, Paul: 24(2)360-362(M/A1985)

Illiaquer, G. See Loiseaux, B.: 24(1)144-149(J/F1985)

Ingwall, R. T.
-; Fielding, H. L.: Hologram recording with a new photopolymer system 24(5)808-811(S/O1985)

Jackson, Howard E. See Boyd, J. T.: 24(2)230-234(M/A1985)

Jacquot, Pierre
-; Rastogi, Pramod K.; Pflug, L.: Holographic interferometry applications in external osteosynthesis 24(5)918-924(S/O1985)

Jalkio, Jeffrey A.
-; Kim, Richard C.; Case, Steven K.: Three-dimensional inspection using multistripe structured light 24(6)966-974(N/D1985)

Janossy, I. See Smith, S. D.: 24(4)569-574(J/A1985)

Jansen, Ben H.
Automatic interpretation of electroencephalograms by means of an expert system 24(6)1009-1010(N/D1985)

Jenkinson, H. A. See Mentzer, M. A.: 24(2)225-229(M/A1985)

Jewell, J. L. See Ovadia, S.: 24(4)565-568(J/A1985)

Johlman, Carolyn. See Laude, David A., Jr.: 24(6)1011-1013(N/D1985)

Johnson, Mark.
Fiber displacement sensors for metrology and control 24(6)961-965(N/D1985)

Johnson, Norman J. E.
Long-wave Optics: the Science and Technology of Infrared and Near-millimetre Waves, Vol. 1 Principles and Vol. 2 Applications. By George W. Chantry. (BR) 24(6)SR152(N/D1985)

Johnson, R. Barry.
Effective radiant sterance computation 24(4)721(J/A1985)

Johnson, Richard V.
-; Guerin, Jean-Michel; Swanberg, Mel E.: Scophony spatial light modulator 24(1)093-100(J/P1985)

Jungles, J. See Stout, K. J.: 24(3)414-418(M/J1985)

Kafri, O. See Livnat, A.: 24(1)150-152(J/P1985)
-; Glatt, I.: Moire deflectometry: a ray deflection approach to optical testing 24(6)944-960(N/D1985)

Kale, B. Michael.
Electron tunneling devices in optics 24(2)267-274(M/A1985)

Kalnay, E. See Atlas, R.: 24(2)341-346(M/A1985)

Kalshoven, James, Jr. See Finkel, Mitchell: 24(2)313-316(M/A1985)

Kania, Don R. See Lee, Ping: 24(1)197-201(J/P1985)

Kato, T. See Nakano, H.: 24(1)207-212(J/P1985)

Khoo, I. C.
-; Shen, Y. R.: Liquid crystals: nonlinear optical properties and processes 24(4)579-585(J/A1985)

Kim, Richard C. See Jalkio, Jeffrey A.: 24(6)966-974(N/D1985)
-; Case, Steven K.; Schock, Harold J.: Holographic optical system for aberration corrections in laser Doppler velocimetry 24(5)786-790(S/O1985)

King, L. A. See Kosel, P. B.: 24(1)176-182(J/P1985)

Kirk, C. P.
-; Moore, D. S.; Nelson, J. C. C.: Analysis of linewidth measurement techniques for the purpose of automation 24(4)650-654(J/A1985)

Klein, Harold J.
Consistency in time and frequency domains in presentation of measured infrared background data 24(3)529-534(M/J1985)

Klein, Philipp H.
-; Nordquist, Paul E. R., Jr.; Singer, Arnold H.: Removal of cations from zirconium to permit use in low loss fluoride optical fibers 24(3)516-517(M/J1985)

Kleinemeier, B.
Real time restoration of image sensor photoresponse nonuniformity 24(1)160-170(J/P1985)

Klim, K.
-; Ziebell, M.: Coude Auxiliary Telescope: a low cost telescope at European Southern Observatory 24(2)363-366(M/A1985)

Klingenberg, Guenter.
Invasive spectroscopic technique—measuring temperature in highly pressurized combustion chambers 24(4)692-696(J/A1985)

Klocek, Paul
-; Sparks, Marshall: Limitations of light propagation in infrared optical fibers: theoretical overview 24(6)1093-1097(N/D1985)

Kolb, C. E. See Frankel, Donald S.: 24(6)996-1003(N/D1985)

Kopeika, N. S.
Effects of aerosols on imaging through the atmosphere: review of spatial frequency and wavelength dependent effects 24(4)707-712(J/A1985)

Kosel, P. B.
-; Wilson, M. R.; Boyd, J. T.; King, L. A.: Configurations for high speed gallium arsenide charge-coupled device imagers 24(1)176-182(J/P1985)

Kruer, M. R. See Milton, A. F.: 24(5)855-862(S/O1985)

Kruger, Robert A. See DelRio, Patrick: 24(3)527-528(M/J1985)

Kumar, B. V. K. Vijaya. See Goutzoulis, A. P.: 24(5)908-912(S/O1985)

Kway, W. L. See Feigelson, R. S.: 24(6)1102-1107(N/D1985)

LaBaugh, Robert J. See Meredith, Barry D.: 24(1)189-196(J/P1985)

Lai, D. C.
-; Verfaille, K.; Potenza, J.: Median filter as image preprocessor for machine recognition 24(6)1030-1037(N/D1985)

Lam, D. K. W. See MacDonald, R. I.: 24(2)220-224(M/A1985)

Laub, G. A.
-; Lenz, G.; Reinhardt, Erich R.: Three-dimensional object representation in imaging systems 24(5)901-905(S/O1985)

Laude, David A., Jr.
-; Johlman, Carolyn; Wilkins, Charles L.: Linked gas chromatography/Fourier transform infrared spectrometry/Fourier transform mass spectrometry for mixture analysis 24(6)1011-1013(N/D1985)

Lauterborn, W. See Hentschel, W.: 24(4)687-691(J/A1985)

Ledor, Kobi
-; Ferris, Ernest J.; benAvi, Doron; Baker, Max L.; Robbins, Mark B.: Percutaneous angioscopy: methodological considerations 24(4)681-682(J/A1985)

Lee, Ping
-; Bartlett, Roger J.; Kania, Don R.: Soft x-ray optics using multilayer mirrors 24(1)197-201(J/P1985)

Lee, Sang Soo. See Chung, Hai Bin: 24(2)317-321(M/A1985)

Lee, Sing H. See Fainman, Y.: 24(3)535-540(M/J1985)
Optical analog solutions of partial differential and integral equations 24(1)041-047(J/P1985)

Lee, Yong H. See Bertollini, Gary P.: 24(3)464-469(M/J1985)

Leith, Emmett N.
-; Voulgaris, P.: Multiplex holography: some new methods 24(1)171-175(J/P1985)

Lenz, G. See Laub, G. A.: 24(5)901-905(S/O1985)

Leone, Peter. See Finkel, Mitchell: 24(2)313-316(M/A1985)

Levkowitz, Haim. See Chen, Lih-Shyang: 24(5)893-900(S/O1985)

Lewis, Robert W.
Quantitative shadow method for measuring a one-dimensional refractive index distribution 24(6)1098-1101(N/D1985)

Li, D. W. See Chiang, F. P.: 24(6)936-943(N/D1985)

Lin, Herbert.
Beam Weapons: the Next Arms Race. By Jeff Hecht. (BR) 24(6)SR156(N/D1985)

Lin, L. H. See Pusek, Richard L.: 24(5)731-734(S/O1985)

Linden, K. J.
-; Palmacci, S. T.: Ten micrometer infrared light emitting diodes for radiometric sources 24(4)719-720(J/A1985)

Little, M. J. See Tozer, B. A.: 24(5)746-753(S/O1985)

Livnat, A.
-; Kafri, O.: Slope and deformation mapping by grating projection technique 24(1)150-152(J/P1985)

Loehr, S. R. See Bruce, A. J.: 24(3)522-526(M/J1985)

Loiseaux, B.
-; Illiaquer, G.; Huignard, J. P.: Dynamic optical cross correlator using a liquid crystal light valve and a bismuth silicon oxide crystal in the Fourier plane 24(1)144-149(J/P1985)

Lokberg, Ole J.
Mapping of in-plane vibration modes by electronic speckle pattern interferometry 24(2)356-359(M/A1985)

Lowrance, John. See Everett, Paul: 24(2)360-362(M/A1985)

MacDonald, R. I.
-; Lam, D. K. W.: Optoelectronic switch matrices: recent developments 24(2)220-224(M/A1985)

MacFarlane, Malcolm J. See Harvey, James E.: 24(1)183-188(J/P1985)

MacKenzie, H. A. See Smith, S. D.: 24(4)569-574(J/A1985)

Magarinos, Jose R.
-; Coleman, Daniel J.: Holographic mirrors 24(5)769-780(S/O1985)

Mai, Xu. See Seaton, C. T.: 24(4)593-599(J/A1985)

Mandel, Leonard.
Statistical Optics. By Joseph W. Goodman. (BR) 24(5)SR118(S/O1985)

Manuccia, T. J. See Duncan, M. D.: 24(2)352-355(M/A1985)

Marcuse, Dietrich.
Fundamentals of Microoptics: Distributed-Index, Microlens, and Stacked Planar Optics. By K. Iga, Y. Kokubun, and M. Oikawa. (BR) 24(6)SR152-SR154(N/D1985)

Marrakchi, A.
-; Tanguay, Armand R., Jr.; Yu, J.; Psaltis, Demetri: Physical characterization of the photorefractive incoherent to coherent optical converter 24(1)124-131(J/F1985)

Marshall, S. J. See Munis, R. H.: 24(5)872-878(S/O1985)

Maslow, James E.
Patent and Trademark Tactics and Practice. By David A. Burge. (BR) 24(1)SR012-SR013(J/F1985)

Masson, Andre. See Angenieux, Jacques: 24(3)499-501(M/J1985)

Mathew, J. G. H. See Smith, S. D.: 24(4)569-574(J/A1985)

Maul, M. See Bickel, G.: 24(6)975-977(N/D1985)
See Hausler, G.: 24(6)978-980(N/D1985)

Mauldin, L. E., III
-; Zaun, N. H.; McCormick, M. Patrick, Jr.; Guy, J. H.; Vaughn, W. R.: Stratospheric Aerosol and Gas Experiment II instrument: a functional description 24(2)307-312(M/A1985)

Mayville, R. A. See Reynolds, George O.: 24(5)757-768(S/O1985)

McCartney, D. J. See Duncan, S. S.: 24(5)781-785(S/O1985)

McCaughan, L.
Long wavelength titanium-doped lithium niobate directional coupler optical switches and switch arrays 24(2)241-243(M/A1985)

McCormick, M. Patrick, Jr. See Mauldin, L. E., III: 24(2)307-312(M/A1985)

McIlwain, M. E. See Deason, V. A.: 24(5)735-740(S/O1985)

McQuoid, J. A. See Duncan, S. S.: 24(5)781-785(S/O1985)

Mecherle, G. S. See Barry, J. D.: 24(6)1049-1054(N/D1985)

Mentzer, M. A.
-; Hunsperger, R. G.; Sriram, S.; Bartko, J.; Wlodawski, M. S.; Zavada, J. M.; Jenkinson, H. A.: Ion implanted optical waveguides in gallium arsenide 24(2)225-229(M/A1985)

Menyuk, Norman.
Optical Remote Sensing of Air Pollution. Edited by P. Camagni and S. Sandroni. (BR) 24(2)SR041-SR042(M/A1985)

Meredith, Barry D.
-; Murray, Nicholas D.; LaBaugh, Robert J.; Aanstoos, James V.: Spaceborne processing of multispectral image data: evaluation of experimental system for 24(1)189-196(J/F1985)

Merz, James L.
-; Yuan, Y. R.; Vawter, G. A.: Photonics for integrated circuits and communications 24(2)214-219(M/A1985)

Meyrueis, Patrick
-; Pfeiffer, Pierre: Principles of a switching extensive fiber optic network 24(5)869-871(S/O1985)

Miller, D. A. B. See Chemla, D. S.: 24(4)556-564(J/A1985)

Milton, A. F.
-; Barone, F. R.; Kruer, M. R.: Influence of nonuniformity on infrared focal plane array performance 24(5)855-862(S/O1985)

Miner, L. See Spencer, R. S.: 24(3)548-554(M/J1985)

Miner, Susan M. See Detrio, John A.: 24(3)419-422(M/J1985)

Mirsalehi, M. M. See Gaylord, Thomas K.: 24(1)048-058(J/F1985)

Modarress, D. See Tan, H.: 24(3)435-440(M/J1985)

Moeller, Charles E. See Geary, Joseph M.: 24(2)332-337(M/A1985)

Moore, D. S. See Kirk, C. P.: 24(4)650-654(J/A1985)

Moore, Duncan T.
Microwave and Optical Ray Geometry. By S. Cornbleet. (BR) 24(1)SR013-SR014(J/F1985)

Mord, Allan J.
-; Endsley, Neil H.; Ramberg, Eric; Reitsema, Harold J.: Electronic image alignment: implementation and applications to imaging system design 24(3)507-515(M/J1985)

Morita, H. See Nakano, H.: 24(1)207-212(J/F1985)

Morris, G. Michael.
Optical computing by Monte Carlo methods 24(1)086-090(J/F1985)

Mossadegh, R. See Bruce, A. J.: 24(3)522-526(M/J1985)

Mottier, P. See Gidon, P.: 24(2)235-240(M/A1985)

Moynihan, C. T. See Bruce, A. J.: 24(3)522-526(M/J1985)

Mulholland, George.
Introduction to Aerosol Science. By Parker C. Reist. (BR) 24(3)SR068(M/J1985)

Munis, R. H.
-; Marshall, S. J.: Thermal emissivity of diathermanous materials 24(5)872-878(S/O1985)

Murray, Nicholas D. See Meredith, Barry D.: 24(1)189-196(J/F1985)

Murty, M. V. R. K.
Nonreversible mirrors equivalent to saddle mirrors 24(2)329-331(M/A1985)
Offner 1:1 system: some further uses 24(2)326-328(M/A1985)
Optical system equivalent to a variable power saddle mirror 24(3)497-498(M/J1985)

Nakano, H.
-; Morita, H.; Washida, H.; Kato, T.; Hayashi, S.; Onoe, A.: Low cost high performance antireflective coatings for solar cells 24(1)207-212(J/F1985)

Naumaan, A. See Boyd, J. T.: 24(2)230-234(M/A1985)

Neff, John A.
Optical computing (Ed) 24(1)001(J/F1985)

Nelson, J. C. C. See Kirk, C. P.: 24(4)650-654(J/A1985)

Neumann, Don B.
Comparative holography: technique for eliminating background fringes in holographic interferometry 24(4)625-627(J/A1985)

Nordquist, Paul E. R., Jr. See Klein, Philipp H.: 24(3)516-517(M/J1985)

Nose, A. See Gilbert, J. A.: 24(4)628-631(J/A1985)

O'Neill, Edward L.
Coherence and Quantum Optics V. Edited by Leonard Mandel and Emil Wolf. (BR) 24(4)SR099-SR100(J/F1985)

Oberdier, Larry M. See Bertollini, Gary P.: 24(3)464-469(M/J1985)

Obergefell, L. A. See Havener, A. George: 24(3)441-445(M/J1985)

Obray, C. See Stout, K. J.: 24(3)414-418(M/J1985)

Onoe, A. See Nakano, H.: 24(1)207-212(J/F1985)

Opalka, S. M. See Bruce, A. J.: 24(3)522-526(M/J1985)

Orton, Glen S.
Remote Sounding of Atmospheres (Cambridge Planetary Science Series, Vol. 5). By J. T. Houghton, F. W. Taylor, and C. D.

Rodgers. (BR) 24(3)SR066-SR067(M/J1985)

Ovadia, S.
-; Gibbs, H. M.; Jewell, J. L.; Sarid, D.; Peyghambarian, N.: Evidence that room temperature optical bistability is excitonic in both bulk & multiple quantum well gallium arsenide 24(4)565-568(J/A1985)

Page, R. See Pitlak, R. T.: 24(4)639-644(J/A1985)

Palmacci, S. T. See Linden, K. J.: 24(4)719-720(J/A1985)

Pape, Dennis R.
Optically addressed membrane spatial light modulator 24(1)107-110(J/F1985)

Papuchon, M. See Pocholle, J. P.: 24(4)600-608(J/A1985)

Partin, D. L.
Heterojunction stripe geometry lead salt diode lasers grown by molecular beam epitaxy 24(2)367-370(M/A1985)

Payne, P. R. See Carder, Kendall L.: 24(5)863-868(S/O1985)

Pazol, Brian G. See Schroeder, John: 24(4)697-703(J/A1985)

Peiran, Yan
-; Zhenyi, Li; Dazun, Zhao: Optics at the Beijing Institute of Technology (China) (FC) 24(2)SR037(M/A1985)

Peled, A.
Photodeposition recording and display technology 24(4)717-718(J/A1985)

Peng, Gung-Shyong. See Pierluissi, Joseph H.: 24(3)541-547(M/J1985)

Perazzo, N. L. See Bruce, A. J.: 24(3)522-526(M/J1985)

Peyghambarian, N. See Ovadia, S.: 24(4)565-568(J/A1985)
-; Gibbs, H. M.: Optical bistability for optical signal processing and computing 24(1)068-073(J/F1985)

Pfeiffer, Pierre. See Meyrueis, Patrick: 24(5)869-871(S/O1985)

Pflug, L. See Jacquot, Pierre: 24(5)918-924(S/O1985)

Pierce, D. C. See Reynolds, George O.: 24(5)757-768(S/O1985)

Pierluissi, Joseph H.
-; Peng, Gung-Shyong: New molecular transmission band models for LOWTRAN 24(3)541-547(M/J1985)

Piffath, Ronald J. See Hoffland, Lynn D.: 24(6)982-984(N/D1985)

Pitlak, R. T.
-; Page, R.: Pulsed lasers for holographic interferometry 24(4)639-644(J/A1985)

Pless, I. See Haridas, P.: 24(5)741-745(S/O1985)

Plotkowski, Paul D.
-; Hung, Yau Y.; Hovanesian, Joseph D.; Gerhart, Grant R.: Improved fringe carrier technique for unambiguous determination of holographically recorded displacements 24(5)754-756(S/O1985)

Pocholle, J. P.
-; Raffy, J.; Papuchon, M.; Desurvire, E.: Raman and four photon mixing amplification in single mode fibers 24(4)600-608(J/A1985)

Post, Daniel.
Moire interferometry for deformation and strain studies 24(4)663-667(J/A1985)

Potenza, J. See Lai, D. C.: 24(6)1030-1037(N/D1985)

Pryputniewicz, Ryszard J.
Heterodyne holography applications in studies of small components 24(5)849-854(S/O1985)
Holographic interferometry: the 20th anniversary, Part II (Ed) 24(5)820(S/O1985)
Pulsed laser holography in studies of bone motions and deformations 24(5)832-839(S/O1985)
Time average holography in vibration analysis 24(5)843-848(S/O1985)
-; Caulfield, H. John: Holographic interferometry: the 20th anniversary, Part I (Ed) 24(4)624(J/A1985)

Psaltis, Demetri. See Marrakchi, A.: 24(1)124-131(J/F1985)

Putnam, R. S. See Caulfield, H. John: 24(1)065-067(J/F1985)

Quinnez, S. See Hillion, P.: 24(1)153-159(J/F1985)
See Hillion, P.: 24(2)290-297(M/A1985)

Raffy, J. See Pocholle, J. P.: 24(4)600-608(J/A1985)

Rajbenbach, H. See Huignard, J. P.: 24(4)586-592(J/A1985)

Ramberg, Eric. See Mord, Allan J.: 24(3)507-515(M/J1985)

Ramos-Izquierdo, L. See Reynolds, George O.: 24(5)757-768(S/O1985)

Rast, Howard. See Bendow, Bernard: 24(6)1072-1080(N/D1985)

Rastogi, Pramod K. See Jacquot, Pierre: 24(5)918-924(S/O1985)

Refregier, Ph. See Huignard, J. P.: 24(4)586-592(J/A1985)

Rega, Anthony. See D'Amelio, Frank D.: 24(4)672-675(J/A1985)

Reid, J. J. E. See Smith, S. D.: 24(4)569-574(J/A1985)

Reinhardt, Erich R. See Laub, G. A.: 24(5)901-905(S/O1985)

Reintjes, J. See Duncan, M. D.: 24(2)352-355(M/A1985)

Reitsema, Harold J. See Mord, Allan J.: 24(3)507-515(M/J1985)

Reynolds, G. A.
-; Short, M.; Whiffen, M. C.: Automated reduction of instantaneous flow field images 24(3)475-479(M/J1985)

Reynolds, George O.
-; Servaes, D. A.; Ramos-Izquierdo, L.; DeVelis, John B.; Pierce, D. C.; Hilton, P. D.; Mayville, R. A.: Holographic fringe linearization interferometry for defect detection 24(5)757-768(S/O1985)

Reynolds, L. D. See Deason, V. A.: 24(5)735-740(S/O1985)

Rice, R. R. See Bryan, D. A.: 24(1)138-143(J/F1985)

Rice, S. H. See Spencer, R. S.: 24(3)548-554(M/J1985)

Robbins, Mark B. See Ledor, Kobi: 24(4)681-682(J/A1985)

Roehl, Joseph E.
Microprocessor controlled chemical detection and alarm system based on ion mobility spectrometry 24(6)985-990(N/D1985)

Ross, Douglas A.
Optics and Lasers Including Fibers and Integrated Optics. By M. Young. (BR) 24(4)SR099(J/F1985)

Rossi, U. See Coppa, G.: 24(4)676-680(J/A1985)

Rouchouse, Yvon. See Angenieux, Jacques: 24(3)499-501(M/J1985)

Route, R. K. See Feigelson, R. S.: 24(6)1102-1107(N/D1985)

Russell, Ray W. See Smith, Howard A.: 24(2)275-284(M/A1985)

Ryan-Howard, Danette P. See Howard, James W.: 24(2)263-266(M/A1985)

Saito, Theodore T.
Laser Interaction and Related Plasma Phenomena, Vol. 6. Edited by Heinrich Hora and George H. Miley. (BR) 24(1)SR014(J/F1985)

San Soro, Robert.
Aerosols: Science, Technology & Industrial Applications of Airborne Particles. Edited by Benjamin Y. H. Liu, David Y. H. Pui, and Heinz J. Fissan. (BR) 24(4)SR098-SR099(J/A1985)

Sarid, D. See Ovadia, S.: 24(4)565-568(J/A1985)

Schmieder, David E.
-; Wolfe, Burton: Empirical television sensor performance model 24(5)882-887(S/O1985)

Schneckenburger, Herbert.
Time resolved microfluorescence in biomedical diagnosis

24(6)1042-1044(N/D1985)

Schock, Harold J. See Kim, Richard C.: 24(5)786-790(S/O1985)

Scholten, Daniel K. See Tom, Victor T.: 24(6)1026-1029(N/D1985)

Schroeder, John
-; Fox-Bilmont, Marsha; Pazol, Brian G.; Tsoukala, Veneta; Drexhage, Martin G.; El-Bayoumi, Osama H.: Rayleigh and Brillouin scattering in heavy metal fluoride glasses: intrinsic Rayleigh scattering 24(4)697-703(J/A1985)

Schwartz, A.
-; Wang, X-Y.; Warde, Cardinal: Electron beam addressed microchannel spatial light modulator 24(1)119-123(J/F1985)

Seaton, C. T.
-; Mai, Xu; Stegeman, G. I.; Winful, H. G.: Nonlinear guided wave applications 24(4)593-599(J/A1985)

Seeley, Kathleen S.
-; Gaskill, Jack D.: Optics at the Optical Sciences Center, Part II (PC) 24(1)SR008-SR012(J/F1985)

Servaes, D. A. See Reynolds, George O.: 24(5)757-768(S/O1985)

Sessions, R. See Geary, Joseph M.: 24(2)332-337(M/A1985)

Seymour, Robert J. See Dagenais, Mario: 24(4)555(J/A1985)

Shan, Y. R. See Khoo, I. C.: 24(4)579-585(J/A1985)

Short, M. See Reynolds, G. A.: 24(3)475-479(M/J1985)

Simard, R. See Benton, Stephen A.: 24(2)338-340(M/A1985)

Sindoni, O. I. See Frankel, Donald S.: 24(6)981(N/D1985)

Singer, Arnold H. See Klein, Philipp H.: 24(3)516-517(M/J1985)

Skinner, Doyle P. See Holman, Robert L.: 24(2)251-255(M/A1985)

Sklar, Edward. See Stover, John C.: 24(3)404-407(M/J1985)

Smigielski, P. See Stimpfling, A.: 24(5)821-823(S/O1985)

Smigocki, E. See Spencer, R. S.: 24(3)548-554(M/J1985)

Smirl, Arthur L. See VanStryland, Eric W.: 24(4)613-623(J/A1985)

Smith, Howard A.
-; Fischer, Jacqueline; Waltman, William B.; Russell, Ray W.; Wollman, Eric R.; Albert, Elise; Stuart, Frank E.: Cryogenic servo-controlled infrared Fabry-Perot spectrometer 24(2)275-284(M/A1985)

Smith, P. W. See Chemla, D. S.: 24(4)556-564(J/A1985)

Smith, S. D.
-; Janossy, I.; MacKenzie, H. A.; Mathew, J. G. H.; Reid, J. J. E.; Taghizadeh, M. R.; Tooley, F. A. P.; Walker, A. C.: Nonlinear optical circuit elements as logic gates for optical computers: the first digital optical circuits 24(4)569-574(J/A1985)

Soileau, M. J. See VanStryland, Eric W.: 24(4)613-623(J/A1985)

Solymar, L. See Huignard, J. P.: 24(4)586-592(J/A1985)

Soref, Richard A.
Optical Fibre Sensing and Signal Processing. By B. Culshaw. (BR) 24(1)SR012(J/F1985)

Sparks, Marshall. See Klocek, Paul: 24(6)1093-1097(N/D1985)

Spencer, R. S.
-; Bergen, G. J.; Fleetwood, Charles M.; Herzig, H.; Miner, L.; Rice, S. H.; Smigocki, E.; Woodgate, B. E.; Zaniewski, J. J.: Fabrication of optical components for the ultraviolet spectrometer and polarimeter on the Solar Maximum Mission 24(3)548-554(M/J1985)

Sriram, S. See Mentzer, M. A.: 24(2)225-229(M/A1985)
Integrated optical circuit engineering (Ed) 24(2)213(M/A1985)
Optoelectronic Switching Systems in Telecommunications & Computers. By Herbert A. Elion and V. N. Morozov. (BR) 24(1)SR014(J/F1985)

Stegeman, G. I. See Seaton, C. T.: 24(4)593-599(J/A1985)

Steppel, Richard N.
Laser Dyes: Properties of Organic Compounds for Dye Lasers. By Mitsuo Maeda. (BR) 24(5)SR120(S/O1985)

Steward, R. G. See Carder, Kendall L.: 24(5)863-868(S/O1985)

Stimpfling, A.
-; Smigielski, P.: Compensating and measuring any motion of three-dimensional objects in holographic interferometry, new method for 24(5)821-823(S/O1985)

Stinespring, Charter D.
Ion Implantation and Beam Processing. Edited by J. S. Williams and J. M. Poate. (BR) 24(5)SR120(S/O1985)

Stout, K. J.
-; Obray, C.; Jungles, J.: Specification and control of surface finish: empiricism vs dogmatism 24(3)414-418(M/J1985)

Stover, John C.
-; Cady, Fredrick M.; Sklar, Edward: Measurement of low angle scatter 24(3)404-407(M/J1985)

Strand, Timothy C.
Optical three-dimensional sensing for machine vision 24(1)033-040(J/F1985)
Three-dimensional sensing for inspection (Ed) 24(6)925(N/D1985)

Strange, Maxwell. See Finkel, Mitchell: 24(2)313-316(M/A1985)

Streibl, N. See Bartelt, H.: 24(6)1038-1041(N/D1985)

Strickland, Robin N.
-; Aly, Maged Youssef: Image sharpness enhancement using adaptive 3x3 convolution masks 24(4)683-686(J/A1985)

Stuart, Frank E. See Smith, Howard A.: 24(2)275-284(M/A1985)

Su, J. C. See Fraser, Donald: 24(2)298-306(M/A1985)

Swanberg, Mel E. See Johnson, Richard V.: 24(1)093-100(J/F1985)

Swanson, Gary J.
-; Veldkamp, Wilfrid B.: Binary lenses for use at 10.6 micrometers 24(5)791-795(S/O1985)

Sweeney, K. L. See Bryan, D. A.: 24(1)138-143(J/F1985)

Taghizadeh, M. R. See Smith, S. D.: 24(4)569-574(J/A1985)

Takacs, P. Z. See Church, Eugene L.: 24(3)396-403(M/J1985)

Tan, H.
-; Modarress, D.: Algebraic reconstruction technique code for tomographic interferometry 24(3)435-440(M/J1985)

Tanguay, Armand R., Jr. See Marrakchi, A.: 24(1)124-131(J/F1985)
Materials requirements for optical processing and computing devices 24(1)002-018(J/F1985)
-; Warde, Cardinal: Optical information processing components (Ed) 24(1)091(J/F1985)

Thalmann, R. See Dandliker, R.: 24(5)824-831(S/O1985)
-; Dandliker, R.: Holographic contouring using electronic phase measurement 24(6)930-935(N/D1985)

Thonn, Tracy F.
-; Azzam, R. M. A.: Multiple reflection polarizers using dielectric coated metallic mirrors 24(1)202-206(J/F1985)

Thurn, Gerd. See Brodmann, Rainer: 24(3)408-413(M/J1985)

Ticknor, Anthony J.
-; Easton, Roger L.; Barrett, Harrison H.: Two-dimensional Radon-Fourier transformer 24(1)082-085(J/F1985)

Timlin, H. A. See Boyd, J. T.: 24(2)230-234(M/A1985)

Timothy, J. G.
Multianode microchannel array detector systems: performance characteristics 24(6)1066-1071(N/D1985)

Tom, Victor T.
-; Carlotto, Mark J.; Scholten, Daniel K.: Spatial sharpening of Thematic Mapper data using a multiband approach 24(6)1026-1029(N/D1985)

Tomaschke, H. E. See Bryan, D. A.: 24(1)138-143(J/F1985)

Tome, Jay A.
-: Yu, Francis T. S.; Gerhart, Grant R.: Multiplexed moire interferometry with white light processing 24(5)879-881(S/O1985)

Tooley, F. A. P. See Smith, S. D.: 24(4)569-574(J/A1985)

Tozer, B. A.
-: Glanville, R.; Gordon, A. L.; Little, M. J.; Webster, J. M.; Wright, D. G.: Holography applied to inspection and measurement in an industrial environment 24(5)746-753(S/O1985)

Tricoles, Gus.
Millimeter Components and Techniques, Part II. Edited by Kenneth J. Button. (BR) 24(4)SR098(J/A1985)
Millimeter Components and Techniques, Part III. Edited by Kenneth J. Button. (BR) 24(6)SR154-SR156(N/D1985)

Tripathy, S. K. See Carter, G. M.: 24(4)609-612(J/A1985)

Trivedi, Mohan M.
-: Harlow, Charles A.: Identification of unique objects in high resolution aerial images 24(3)502-506(M/J1985)

Trivedi, Sushma S. See Chen, Lih-Shyang: 24(5)893-900(S/O1985)

Trolinger, James D. See Hess, Cecil F.: 24(3)470-474(M/J1985)
Automated data reduction in holographic interferometry 24(5)840-842(S/O1985)
Image and hologram data reduction (Ed) 24(3)428(M/J1985)

Tsoukala, Veneta. See Schroeder, John: 24(4)697-703(J/A1985)

Tweed, David G.
Resonant scanner linearization techniques 24(6)1018-1022(N/D1985)

Udupa, Jayaram K. See Chen, Lih-Shyang: 24(5)893-900(S/O1985)

Valette, S. See Gidon, P.: 24(2)235-240(M/A1985)

Valley, George C.
Principles of Nonlinear Optics. By Y. R. Shen. (BR) 24(3)SR067-SR068(M/J1985)

Vanherzeele, H. See VanStryland, Eric W.: 24(4)613-623(J/A1985)

vanRenesse, R. L.
-: Burgmeijer, J. W.: Application of pulsed reflection holography to material testing 24(6)1086-1092(N/D1985)

VanStryland, Eric W.
-: Vanherzeele, H.; Woodall, M. A.; Soileau, M. J.; Smirl, Arthur L.; Guha, Shekhar; Boggess, Thomas F.: Two photon absorption, nonlinear refraction, and optical limiting in semiconductors 24(4)613-623(J/A1985)

Vaughn, W. R. See Mauldin, L. E., III: 24(2)307-312(M/A1985)

Vawter, G. A. See Merz, James L.: 24(2)214-219(M/A1985)

Veldkamp, Wilfrid B. See Swanson, Gary J.: 24(5)791-795(S/O1985)

Verber, Carl M.
Integrated optical architectures for matrix multiplication 24(1)019-025(J/F1985)

Verfaille, K. See Lai, D. C.: 24(6)1030-1037(N/D1985)

Vorburger, Theodore V. See Church, Eugene L.: 24(3)388-395(M/J1985)
Surface metrology (Ed) 24(3)371(M/J1985)

Voulgaris, P. See Leith, Emmett N.: 24(1)171-175(J/F1985)

Vunck, D. See Geary, Joseph M.: 24(2)332-337(M/A1985)

Walker, A. C. See Smith, S. D.: 24(4)569-574(J/A1985)

Wallace, Nelson W. See Armstrong, Scott A.: 24(2)256(M/A1985)

Waltman, William B. See Smith, Howard A.: 24(2)275-284(M/A1985)

Wang, X-Y. See Schwartz, A.: 24(1)119-123(J/F1985)

Warde, Cardinal. See Schwartz, A.: 24(1)119-123(J/F1985)
See Tanguay, Armand R., Jr.: 24(1)091(J/F1985)
-: Efron, Uzi: Materials and devices for optical information processing (Ed) 24(1)092(J/F1985)

Washida, H. See Nakano, H.: 24(1)207-212(J/F1985)

Webster, J. M. See Tozer, B. A.: 24(5)746-753(S/O1985)

Werlberger, Peter.
High speed combustion photography with endoscopes in actual diesel engines: a new approach 24(6)1045-1048(N/D1985)

Wesolowski, P. See Fuzessy, Z.: 24(6)1023-1025(N/D1985)

Whiffen, M. C. See Reynolds, G. A.: 24(3)475-479(M/J1985)

White, A. M. See Dean, A. B.: 24(4)668-671(J/A1985)

Wick, R. See Geary, Joseph M.: 24(2)332-337(M/A1985)

Wickramasinghe, H. K.
Differential laser heterodyne micrometrology 24(6)926-929(N/D1985)

Wilkins, Charles L. See Laude, David A., Jr.: 24(6)1011-1013(N/D1985)

Wilson, M. R. See Kosel, P. B.: 24(1)176-182(J/F1985)

Winful, H. G. See Seaton, C. T.: 24(4)593-599(J/A1985)

Wlodawski, M. S. See Mentzer, M. A.: 24(2)225-229(M/A1985)

Wolfe, Burton. See Schmieder, David E.: 24(5)882-887(S/O1985)

Wollman, Eric R. See Smith, Howard A.: 24(2)275-284(M/A1985)

Woodall, M. A. See VanStryland, Eric W.: 24(4)613-623(J/A1985)

Woodgate, B. E. See Spencer, R. S.: 24(3)548-554(M/J1985)

Woodin, R. L.
Laser Applications, Vol. 5. Edited by John F. Ready and Robert K. Erf. (BR) 24(6)SR150-SR152(N/D1985)

Wright, D. G. See Tozer, B. A.: 24(5)746-753(S/O1985)

Wu, R. W. See Boyd, J. T.: 24(2)230-234(M/A1985)

Wu, S. T. See Efron, Uzi: 24(1)111-118(J/F1985)

Wuerker, Ralph F.
-: Hill, D. A.: Holographic microscopy 24(3)480-484(M/J1985)

Wyant, James C. See Church, Eugene L.: 24(3)388-395(M/J1985)

Yoder, R. C.
Elimination of clover in machining of off-centered conic mirrors 24(3)485-496(M/J1985)

Yu, Francis T. S. See Tome, Jay A.: 24(5)879-881(S/O1985)
-: Gerhart, Grant R.: White light transmission color holography: a review 24(5)812-819(S/O1985)

Yu, J. See Marrakchi, A.: 24(1)124-131(J/F1985)

Yu, Yung H. See Becker, Friedhelm: 24(3)429-434(M/J1985)

Yuan, Y. R. See Merz, James L.: 24(2)214-219(M/A1985)

Zaniewski, J. J. See Spencer, R. S.: 24(3)548-554(M/J1985)

Zanker, Adam.
Determination of the incident angle of solar rays on a flat surface (PC) 24(4)SR094-SR096(J/A1985)

Zaun, N. H. See Mauldin, L. E., III: 24(2)307-312(M/A1985)

Zavada, J. M. See Mentzer, M. A.: 24(2)225-229(M/A1985)

Zelson, D. E. See Boyd, J. T.: 24(2)230-234(M/A1985)

Zhenyi, Li. See Peiran, Yan: 24(2)SR037(M/A1985)

Ziebell, M. See Klim, K.: 24(2)363-366(M/A1985)

Zucchino, Paul. See Everett, Paul: 24(2)360-362(M/A1985)

Optical Engineering
Subject Index to Volume 24 (1985)

KEY TO INDEX USE

Paper titles are indexed under appropriate subject terms, which are printed in boldface. Each entry gives the paper title, the author(s), code letters (when applicable), and the location of the paper in Volume 24.

Code letters indicate:

(BR) Book review
(FC) Forum column
(Ed) Editorial
(SC) Short communication
(L) Letter

Aberrations
Aberrations of the Mangin mirror (Gelles, Rubin) 24(2)322-325(M/A1985)
Aplanatic four spherical mirror system (Chung, Hai Bin; Lee, Sang Soo) 24(2)317-321(M/A1985)
Holographic optical system for aberration corrections in laser Doppler velocimetry (Kim, Richard C.; Case, Steven K.; Schock, Harold J.) 24(5)786-790(S/O1985)
Offner 1:1 system: some further uses (Murty, M. V. R. K.) 24(2)326-328(M/A1985)

Absorption
New molecular transmission band models for LOWTRAN (Pierluissi, Joseph H.; Peng, Gung-Shyong) 24(3)541-547(M/J1985)
Nonlinear optical properties of GaAs/GaAlAs multiple quantum well material: phenomena and applications (Chemla, D. S.; Miller, D. A. B.; Smith, P. W.) 24(4)556-564(J/A1985)
Removal of cations from zirconium to permit use in low loss fluoride optical fibers (Klein, Philipp H.; Nordquist, Paul E. R., Jr.; Singer, Arnold H.) 24(3)516-517(M/J1985)
Solid state spectral transmissometer and radiometer (Carder, Kendall L.; Steward, R. G.; Payne, P. R.) 24(5)863-868(S/O1985)
Spectral correlator technologies (Frankel, Donald S.; Camac, M.; Caulfield, H. John; Gozewski, C.; Kolb, C. E.) 24(6)996-1003(N/D1985)
Two photon absorption, nonlinear refraction, and optical limiting in semiconductors (VanStryland, Eric W.; Vanherzeele, H.; Woodall, M. A.; Soileau, M. J.; Smirl, Arthur L.; Guha, Shekhar; Boggess, Thomas F.) 24(4)613-623(J/A1985)

Acoustooptics
Detector size effects on peak-to-sidelobe ratio in bulk acousto-optic spectrum analyzer (Goutzoulis, A. P.; Kumar, B. V. K. Vijaya) 24(5)908-912(S/O1985)
Materials for acoustooptic devices, selection of (Chang, I. C.) 24(1)132-137(J/F1985)
Scophony spatial light modulator (Johnson, Richard V.; Guerin, Jean-Michel; Swanberg, Mel E.) 24(1)093-100(J/F1985)

Adaptive optics
Image sharpness enhancement using adaptive 3x3 convolution masks (Strickland, Robin N.; Aly, Maged Youssef) 24(4)683-686(J/A1985)

Aerosols
Aerosols: Science, Technology & Industrial Applications of Airborne Particles. Edited by Benjamin Y. H. Liu, David Y. H. Pui, and Heinz J. Fissan. (Reviewed by Santoro, Robert) (BR) 24(4)SR098-SR099(J/A1985)
Effects of aerosols on imaging through the atmosphere: review of spatial frequency and wavelength dependent effects (Kopeika, N. S.) 24(4)707-712(J/A1985)
Holographic microscopy (Wuerker, Ralph F.; Hill, D. A.) 24(3)480-484(M/J1985)
Image processing system to analyze droplet distributions in sprays (Bertollini, Gary P.; Oberdier, Larry M.; Lee, Yong H.) 24(3)464-469(M/J1985)
Introduction to Aerosol Science. By Parker C. Reist. (Reviewed by Mulholland, George) (BR) 24(3)SR068(M/J1985)
Optical Remote Sensing of Air Pollution. Edited by P. Camagni and S. Sandroni. (Reviewed by Menyuk, Norman) (BR) 24(2)SR041-SR042(M/A1985)
Stratospheric Aerosol and Gas Experiment II instrument: a functional description (Mauldin, L. E., III; Zaun, N. H.; McCormick, M. Patrick, Jr.; Guy, J. H.; Vaughn, W. R.) 24(2)307-312(M/A1985)
Use of simulation data sets for assessing interlaboratory pattern recognition accuracy (Currie, L. A.) 24(6)1004-1008(N/D1985)

Alignment
Electronic image alignment: implementation and applications to imaging system design (Mord, Allan J.; Endsley, Neil H.; Ramberg, Eric; Reitsema, Harold J.) 24(3)507-515(M/J1985)

Amplification, light
Raman and four photon mixing amplification in single mode fibers (Pocholle, J. P.; Raffy, J.; Papuchon, M.; Desurvire, E.) 24(4)600-608(J/A1985)

Apertures, synthetic
Design and performance of ranging telescopes: monolithic vs synthetic aperture (Harvey, James E.; MacFarlane, Malcolm J.; Forgham, James L.) 24(1)183-188(J/F1985)

Arrays, detector
Guided wave optical structures utilizing silicon (Boyd, J. T.; Wu, R. W.; Zelmon, D. E.; Naumaan, A.; Timlin, H. A.; Jackson, Howard E.) 24(2)230-234(M/A1985)
Multianode microchannel array detector systems: performance characteristics (Timothy, J. G.) 24(6)1066-1071(N/D1985)
Optoelectronic switch matrices: recent developments (MacDonald, R. I.; Lam, D. K. W.) 24(2)220-224(M/A1985)

Arrays, focal plane
Influence of nonuniformity on infrared focal plane array performance (Milton, A. F.; Barone, F. R.; Kruer, M. R.) 24(5)855-862(S/O1985)

Aspherics
Aspherics: precision manufacturing by vacuum evaporation (Angenieux, Jacques; Masson, Andre; Rouchouse, Yvon) 24(3)499-501(M/J1985)

Astronomy
Multianode microchannel array detector systems: performance characteristics (Timothy, J. G.) 24(6)1066-1071(N/D1985)

Atmospheres
Remote Sounding of Atmospheres (Cambridge Planetary Science Series, Vol. 5). By J. T. Houghton, F. W. Taylor, and C. D. Rodgers. (Reviewed by Orton, Glen S.) (BR) 24(3)SR066-SR067(M/J1985)

Atmospheric optics
Effects of aerosols on imaging through the atmosphere: review of spatial frequency and wavelength dependent effects (Kopeika, N. S.) 24(4)707-712(J/A1985)
New molecular transmission band models for LOWTRAN (Pierluissi, Joseph H.; Peng, Gung-Shyong) 24(3)541-547(M/J1985)
Stratospheric Aerosol and Gas Experiment II instrument: a functional description (Mauldin, L. E., III; Zaun, N. H.; McCormick, M. Patrick, Jr.; Guy, J. H.; Vaughn, W. R.) 24(2)307-312(M/A1985)

Beams
Beam pointing error as a significant design parameter for satellite-borne free-space optical communication systems (Barry, J. D.; Mecherle, G. S.) 24(6)1049-1054(N/D1985)
Beam Weapons: the Next Arms Race. By Jeff Hecht. (Reviewed by Lin, Herbert) (BR) 24(6)SR156(N/D1985)
Ion Implantation and Beam Processing. Edited by J. S. Williams and J. M. Poate. (Reviewed by Stinespring, Charter D.) (BR) 24(5)SR120(S/O1985)
Moire deflectometry: a ray deflection approach to optical testing (Kafri, O.; Glatt, I.) 24(6)944-960(N/D1985)
Self-trapping using the spinor wave equation: analysis of (Hillion, P.; Quinnez, S.) 24(2)290-297(M/A1985)

Beams, electron
Electron beam addressed microchannel spatial light modulator (Schwartz, A.; Wang, X-Y.; Warde, Cardinal) 24(1)119-123(J/F1985)
Electron beam fabrication of computer-generated holograms (Arnold, Steven M.) 24(5)803-807(S/O1985)

Beams, ion
Ion Implantation and Beam Processing. Edited by J. S. Williams and J. M. Poate. (Reviewed by Stinespring, Charter D.) (BR) 24(5)SR120(S/O1985)

Biology
Imaging biological compounds using the coherent antiStokes Raman scattering microscope (Duncan, M. D.; Reintjes, J.; Manuccia, T. J.) 24(2)352-355(M/A1985)
Time resolved microfluorescence in biomedical diagnosis (Schneckenburger, Herbert) 24(6)1042-1044(N/D1985)

Bistability
Evidence that room temperature optical bistability is excitonic in both bulk & multiple quantum well gallium arsenide (Ovadia, S.; Gibbs, H. M.; Jewell, J. L.; Sarid, D.; Peyghambarian, N.) 24(4)565-568(J/A1985)
Infrared all-optical information processing in semiconductors (Garmire, Elsa) 24(4)575-578(J/A1985)
Liquid crystals: nonlinear optical properties and processes (Khoo, I. C.; Shen, Y. R.) 24(4)579-585(J/A1985)
Materials requirements for optical processing and computing devices (Tanguay, Armand R., Jr.) 24(1)002-018(J/F1985)
Nonlinear guided wave applications (Seaton, C. T.; Mai, Xu; Stegeman, G. I.; Winful, H. G.) 24(4)593-599(J/A1985)
Nonlinear optical circuit elements as logic gates for optical computers: the first digital optical circuits (Smith, S. D.; Janossy, I.; MacKenzie, H. A.; Mathew, J. G. H.; Reid, J. J. E.; Taghizadeh, M. R.; Tooley, F. A. P.; Walker, A. C.) 24(4)569-574(J/A1985)
Optical bistability for optical signal processing and computing (Peyghambarian, N.; Gibbs, H. M.) 24(1)068-073(J/F1985)

Blackbodies
Effective radiant sterance computation (Johnson, R. Barry) 24(4)721(J/A1985)

Book reviews
Aerosols: Science, Technology & Industrial Applications of Airborne Particles. Edited by Benjamin Y. H. Liu, David Y. H. Pui, and Heinz J. Fissan. (Reviewed by Santoro, Robert) (BR) 24(4)SR098-SR099(J/A1985)
Beam Weapons: the Next Arms Race. By Jeff Hecht. (Reviewed by Lin, Herbert) (BR) 24(6)SR156(N/D1985)
Categorized Bibliography of Optical Publications. By Douglas Goodman. (Reviewed by Gaynor, Winn) (BR) 24(3)SR068(M/J1985)
Coherence and Quantum Optics V. Edited by Leonard Mandel and Emil Wolf. (Reviewed by O'Neill, Edward L.) (BR) 24(4)SR099-SR100(J/F1985)
Deconvolution with Applications in Spectroscopy. Edited by Peter A. Jansson. (Reviewed by Dewan, E. M.) (BR) 24(4)SR096-SR098(J/A1985)
Fiber Optic Communications. By Joseph C. Palais. (Reviewed by Forrest, S. R.) (BR) 24(1)SR014-SR016(J/F1985)
Free Electron Lasers. By Thomas C. Marshall. (Reviewed by Gold, S. H.) (BR) 24(5)SR118-SR120(S/O1985)
Fundamentals of Microoptics: Distributed-Index, Microlens, and Stacked Planar Optics. By K. Iga, Y. Kokubun, and M. Oikawa. (Reviewed by Marcuse, Dietrich) (BR) 24(6)SR152-SR154(N/D1985)
Introduction to Aerosol Science. By Parker C. Reist. (Reviewed by Mulholland, George) (BR) 24(3)SR068(M/J1985)
Ion Implantation and Beam Processing. Edited by J. S. Williams and J. M. Poate. (Reviewed by Stinespring, Charter D.) (BR) 24(5)SR120(S/O1985)
Laser Applications, Vol. 5. Edited by John F. Ready and Robert K. Erf. (Reviewed by Woodin, R. L.) (BR) 24(6)SR150-SR152(N/D1985)
Laser Dyes: Properties of Organic Compounds for Dye Lasers. By Mitsuo Maeda. (Reviewed by Steppel, Richard N.) (BR) 24(5)SR120(S/O1985)
Laser Interaction and Related Plasma Phenomena,Vol. 6. Edited by Heinrich Hora and George H. Miley. (Reviewed by Saito, Theodore T.) (BR) 24(1)SR014(J/F1985)
Long-wave Optics: the Science and Technology of Infrared and Near-millimetre Waves, Vol. 1 Principles and Vol. 2 Applications. By George W. Chantry. (Reviewed by Johnson, Norman J. E.) (BR) 24(6)SR152(N/D1985)
Microwave and Optical Ray Geometry. By S. Cornbleet. (Reviewed by Moore, Duncan T.) (BR) 24(1)SR013-SR014(J/F1985)
Millimeter Components and Techniques, Part II. Edited by Kenneth J. Button. (Reviewed by Tricoles, Gus) (BR) 24(4)SR098(J/A1985)
Millimeter Components and Techniques, Part III. Edited by Kenneth J. Button. (Reviewed by Tricoles, Gus) (BR) 24(6)SR154-SR156(N/D1985)
Multiphoton Spectroscopy of Molecules. By S. H. Lin, Y. Fujimura, H. J. Neusser,and E. W. Schlag; edited by Paul F. Liao and Paul Kelley. (Reviewed by Djeu, N.) (BR) 24(2)SR038(M/A1985)
Optical Fibre Sensing and Signal Processing. By B. Culshaw. (Reviewed by Soref, Richard A.) (BR) 24(1)SR012(J/F1985)
Optical Remote Sensing of Air Pollution. Edited by P. Camagni and S. Sandroni. (Reviewed by Menyuk, Norman) (BR) 24(2)SR041-SR042(M/A1985)
Optics and Lasers Including Fibers and Integrated Optics. By M. Young. (Reviewed by Ross, Douglas A.) (BR) 24(4)SR099(J/F1985)
Optoelectronic Switching Systems in Telecommunications & Computers. By Herbert A. Elion and V. N. Morozov. (Reviewed by Sriram, S.) (BR) 24(1)SR014(J/F1985)
Patent and Trademark Tactics and Practice. By David A. Burge. (Reviewed by Maslow, James E.) (BR) 24(1)SR012-SR013(J/F1985)
Photographic Science. By Earl N. Mitchell. (Reviewed by Granger, E. M.) (BR) 24(2)SR042(M/A1985)
Principles of Nonlinear Optics. By Y. R. Shen. (Reviewed by Valley, George C.) (BR) 24(3)SR067-SR068(M/J1985)
Remote Sounding of Atmospheres (Cambridge Planetary Science Series, Vol. 5). By J. T. Houghton, F. W. Taylor, and C. D. Rodgers. (Reviewed by Orton, Glen S.) (BR) 24(3)SR066-SR067(M/J1985)
Spectrometric Techniques, Vol. III. Edited by George A. Vanasse. (Reviewed by Chance, K.) (BR) 24(2)SR038-SR041(M/A1985)
Statistical Optics. By Joseph W. Goodman. (Reviewed by Mandel, Leonard) (BR) 24(5)SR118(S/O1985)

Bubble chambers
Detection of short-lived particles using holography (Haridas, P.; Hafen, E.; Pless, I.; Harton, J.; Dixit, S.; Goloskie, D.; Benton, Stephen A.) 24(5)741-745(S/O1985)

Cameras
High speed holographic movie camera (Hentschel, W.; Lauterborn, W.) 24(4)687-691(J/A1985)

Charge coupled devices
Configurations for high speed gallium arsenide charge-coupled device imagers (Kosel, P. B.; Wilson, M. R.; Boyd, J. T.;

King, L. A.) 24(1)176-182(J/F1985)
Multianode microchannel array detector systems: performance characteristics (Timothy, J. G.) 24(6)1066-1071(N/D1985)
Virtual phase charge coupled device imager operated in frontside electron-bombarded mode (Everett, Paul; Hynecek, Jaroslav; Zucchino, Paul; Lowrance, John) 24(2)360-362(M/A1985)

Chemistry
Microprocessor controlled chemical detection and alarm system based on ion mobility spectrometry (Roehl, Joseph E.) 24(6)985-990(N/D1985)
Spectral signatures of chemical agents and simulants (Hoffland, Lynn D.; Piffath, Ronald J.; Bouck, James B.) 24(6)982-984(N/D1985)
Use of simulation data sets for assessing interlaboratory pattern recognition accuracy (Currie, L. A.) 24(6)1004-1008(N/D1985)

Choppers
Offner 1:1 system: some further uses (Murty, M. V. R. K.) 24(2)326-328(M/A1985)

Chromatography
Linked gas chromatography/Fourier transform infrared spectrometry/Fourier transform mass spectrometry for mixture analysis (Laude, David A., Jr.; Johlman, Carolyn; Wilkins, Charles L.) 24(6)1011-1013(N/D1985)

Coatings
Low cost high performance antireflective coatings for solar cells (Nakano, H.; Morita, H.; Washida, H.; Kato, T.; Hayashi, S.; Onoe, A.) 24(1)207-212(J/F1985)

Coherence
Coherence and Quantum Optics V. Edited by Leonard Mandel and Emil Wolf. (Reviewed by O'Neill, Edward L.) (BR) 24(4)SR099-SR100(J/F1985)

Coherent optical processing
Coherent optical pattern recognition: a review (Casasent, David P.) 24(1)026-032(J/F1985)

Combustion
High speed combustion photography with endoscopes in actual diesel engines: a new approach (Werlberger, Peter) 24(6)1045-1048(N/D1985)
Invasive spectroscopic technique—measuring temperature in highly pressurized combustion chambers (Klingenberg, Guenter 24(4)692-696(J/A1985)

Computers
Computational interferometric description of nested flow fields (Havener, A. George; Obergefell, L. A.) 24(3)441-445(M/J1985)
Computers and strobes (Edgerton, Harold E.) (FC) 24(2)SR036-SR037(M/A1985)
Microcomputer based digital image processing system developed to count and size laser-generated small particle images (Ahlers, K. D.; Alexander, D. R.) 24(6)1060-1065(N/D1985)
Optoelectronic Switching Systems in Telecommunications & Computers. By Herbert A. Elion and V. N. Morozov. (Reviewed by Sriram, S.) (BR) 24(1)SR014(J/F1985)
Programmable calculators: their use in lens design and analysis (Beckmann, Leo H. J. F.) 24(4)713-716(J/A1985)

Correlation
Spatial sharpening of Thematic Mapper data using a multiband approach (Tom, Victor T.; Carlotto, Mark J.; Scholten, Daniel K.) 24(6)1026-1029(N/D1985)
Spectral correlator technologies (Frankel, Donald S.; Camac, M.; Caulfield, H. John; Gozewski, C.; Kolb, C. E.) 24(6)996-1003(N/D1985)

Correlators
Dynamic optical cross correlator using a liquid crystal light valve and a bismuth silicon oxide crystal in the Fourier plane (Loiseaux, B.; Illiaquer, G.; Huignard, J. P.) 24(1)144-149(J/F1985)

Couplers
Long wavelength titanium-doped lithium niobate directional coupler optical switches and switch arrays (McCaughan, L.) 24(2)241-243(M/A1985)
Nonlinear guided wave applications (Seaton, C. T.; Mai, Xu; Stegeman, G. I.; Winful, H. G.) 24(4)593-599(J/A1985)
Principles of a switching extensive fiber optic network (Meyrueis, Patrick; Pfeiffer, Pierre) 24(5)869-871(S/O1985)

Crystals
Single crystal fibers by the laser heated pedestal growth method (Feigelson, R. S.; Kway, W. L.; Route, R. K.) 24(6)1102-1107(N/D1985)

Crystals, liquid
Dynamic optical cross correlator using a liquid crystal light valve and a bismuth silicon oxide crystal in the Fourier plane (Loiseaux, B.; Illiaquer, G.; Huignard, J. P.) 24(1)144-149(J/F1985)
Liquid crystals: nonlinear optical properties and processes (Khoo, I. C.; Shen, Y. R.) 24(4)579-585(J/A1985)
Liquid-crystal-based visible-to-infrared dynamic image converter (Efron, Uzi; Wu, S. T.; Grinberg, Jan; Hess, L. D.) 24(1)111-118(J/F1985)

Data processing
Algebraic reconstruction technique code for tomographic interferometry (Tan, H.; Modarress, D.) 24(3)435-440(M/J1985)
Automated data reduction in holographic interferometry (Trolinger, James D.) 24(5)840-842(S/O1985)
Automated reduction of instantaneous flow field images (Reynolds, G. A.; Short, M.; Whiffen, M. C.) 24(3)475-479(M/J1985)
Consistency in time and frequency domains in presentation of measured infrared background data (Klein, Harold J.) 24(3)529-534(M/J1985)
Image and hologram data reduction (Trolinger, James D.) (Ed) 24(3)428(M/J1985)
Improved fringe carrier technique for unambiguous determination of holographically recorded displacements (Plotkowski, Paul D.; Hung, Yau Y.; Hovanesian, Joseph D.; Gerhart, Grant R.) 24(5)754-756(S/O1985)
Multiwavelength pyrometry: an improved method (Hunter, Gordon B.; Allemand, Charly D.; Eagar, Thomas W.) 24(6)1081-1085(N/D1985)
Optical digital truth table look-up processing (Gaylord, Thomas K.; Mirsalehi, M. M.; Guest, C. C.) 24(1)048-058(J/F1985)
Particle field holography data reduction by Fourier transform analysis (Hess, Cecil F.; Trolinger, James D.) 24(3)470-474(M/J1985)
Spaceborne processing of multispectral image data: evaluation of experimental system for (Meredith, Barry D.; Murray, Nicholas D.; LaBaugh, Robert J.; Aanstoos, James V.) 24(1)189-196(J/F1985)
Tomography in image data compression: principles of (Fraser, Donald; Hunt, B. R.; Su, J. C.) 24(2)298-306(M/A1985)

Deconvolution
Deconvolution with Applications in Spectroscopy. Edited by Peter A. Jansson. (Reviewed by Dewan, E. M.) (BR) 24(4)SR096-SR098(J/A1985)

Deflectors
Materials for acoustooptic devices, selection of (Chang, I. C.) 24(1)132-137(J/F1985)

Detection
Application of pulsed reflection holography to material testing (vanRenesse, R. L.; Burgmeijer, J. W.) 24(6)1086-1092(N/D1985)
Detection of short-lived particles using holography (Haridas, P.; Hafen, E.; Pless, I.; Harton, J.; Dixit, S.; Goloskie, D.; Benton, Stephen A.) 24(5)741-745(S/O1985)
Interference sources in infrared systems operating in closed spaces (Georgopoulos, Chris J.) (FC) 24(3)SR062-SR066(M/J1985)

Detectors
Detector size effects on peak-to-sidelobe ratio in bulk acousto-optic spectrum analyzer (Goutzoulis, A. P.; Kumar, B. V. K. Vijaya) 24(5)908-912(S/O1985)
Electron tunneling devices in optics (Kale, B. Michael) 24(2)267-274(M/A1985)
Influence of nonuniformity on infrared focal plane array performance (Milton, A. F.; Barone, F. R.; Kruer, M. R.) 24(5)855-862(S/O1985)
Multianode microchannel array detector systems: performance characteristics (Timothy, J. G.) 24(6)1066-1071(N/D1985)
Photoconductive detectors employing an optically induced nonlinear resistance (Dean, A. B.; Elliott, C. T.; White, A. M.) 24(4)668-671(J/A1985)

Diamonds
Real time control of spindle runout (Bifano, T. G.; Dow, T. A.) 24(5)888-892(S/O1985)

Digital processing
Adaptive selection of threshold matrix size for pseudogray rendition of images (Carlsohn, Matthias F.; Besslich, Philipp W.) 24(4)655-662(J/A1985)
Automated reduction of instantaneous flow field images (Reynolds, G. A.; Short, M.; Whiffen, M. C.) 24(3)475-479(M/J1985)
Digital fringe reduction techniques applied to measurement of three-dimensional transonic flow fields (Becker, Friedhelm; Yu, Yung H.) 24(3)429-434(M/J1985)
Digital tomography fulcrum height programmer and error correction (DelRio, Patrick; Kruger, Robert A.) 24(3)527-528(M/J1985)
Microcomputer based digital image processing system developed to count and size laser-generated small particle images (Ahlers, K. D.; Alexander, D. R.) 24(6)1060-1065(N/D1985)
Microprocessor controlled chemical detection and alarm system based on ion mobility spectrometry (Roehl, Joseph E.) 24(6)985-990(N/D1985)

Diodes
Ten micrometer infrared light emitting diodes for radiometric sources (Linden, K. J.; Palmacci, S. T.) 24(4)719-720(J/A1985)

Displays
Interactive manipulation of three-dimensional data via two-dimensional display device (Chen, Lih-Shyang; Herman, Gabor T.; Hung, Hsiu-Mei; Levkowitz, Haim; Trivedi, Sushma S.; Udupa, Jayaram K.) 24(5)893-900(S/O1985)
Photodeposition recording and display technology (Peled, A.) 24(4)717-718(J/A1985)
Three dimensional display based on thick holographic phase components (Bartelt, H.; Streibl, N.) 24(6)1038-1041(N/D1985)

Educational optics
Optics at the Optical Sciences Center, Part II (Seeley, Kathleen S.; Gaskill, Jack D.) (PC) 24(1)SR006-SR012(J/F1985)

Electromagnetic waves
Self-steepening and self-modulation of optical beams in the spinor theory of light (Hillion, P.; Quinnez, S.) 24(1)153-159(J/F1985)
Self-trapping using the spinor wave equation: analysis of (Hillion, P.; Quinnez, S.) 24(2)290-297(M/A1985)

Electron tunneling
Electron tunneling devices in optics (Kale, B. Michael) 24(2)267-274(M/A1985)

Electrooptics
Long wavelength titanium-doped lithium niobate directional coupler optical switches and switch arrays (McCaughan, L.) 24(2)241-243(M/A1985)

Emission
Multiwavelength pyrometry: an improved method (Hunter, Gordon B.; Allemand, Charly D.; Eagar, Thomas W.) 24(6)1081-1085(N/D1985)
Thermal emissivity of diathermanous materials (Munis, R. H.; Marshall, S. J.) 24(5)872-878(S/O1985)

Encoders
Tomography in image data compression: principles of (Fraser, Donald; Hunt, B. R.; Su, J. C.) 24(2)298-306(M/A1985)

Excitons
Evidence that room temperature optical bistability is excitonic in both bulk & multiple quantum well gallium arsenide (Ovadia, S.; Gibbs, H. M.; Jewell, J. L.; Sarid, D.; Peyghambarian, N.) 24(4)565-568(J/A1985)
Nonlinear optical properties of GaAs/GaAlAs multiple quantum well material: phenomena and applications (Chemla, D. S.; Miller, D. A. B.; Smith, P. W.) 24(4)556-564(J/A1985)

Fabry-Perot
Cryogenic servo-controlled infrared Fabry-Perot spectrometer (Smith, Howard A.; Fischer, Jacqueline; Waltman, William B.; Russell, Ray W.; Wollman, Eric R.; Albert, Elise; Stuart, Frank E.) 24(2)275-284(M/A1985)

Fiber optics
Battelle's proposed cooperative program to develop guided wave optoelectronic manufacturing technology (Holman, Robert L.; Skinner, Doyle P.) 24(2)251-255(M/A1985)
Fiber optic angioscopes (D'Amelio, Frank D.; DeLisi, Steven T.; Rega, Anthony) 24(4)672-675(J/A1985)
Fiber Optic Communications. By Joseph C. Palais. (Reviewed by Forrest, S. R.) (BR) 24(1)SR014-SR016(J/F1985)
Fiber optic sensors: an overview (Davis, Charles M.) 24(2)347-351(M/A1985)
Fundamentals of Microoptics: Distributed-Index, Microlens, and Stacked Planar Optics. By K. Iga, Y. Kokubun, and M. Oikawa. (Reviewed by Marcuse, Dietrich) (BR) 24(6)SR152-SR154(N/D1985)
Infrared fibers: an overview of prospective materials, fabrication methods, and applications (Bendow, Bernard; Rast, Howard; El-Bayoumi, Osama H.) 24(6)1072-1080(N/D1985)
Limitations of light propagation in infrared optical fibers: theoretical overview (Klocek, Paul; Sparks, Marshall) 24(6)1093-1097(N/D1985)
Nondestructive refractive index characterization of optical fibers using phase contrast scanning optical microscope (Ball, S.) 24(3)518-521(M/J1985)
Optical Fibre Sensing and Signal Processing. By B. Culshaw. (Reviewed by Soref, Richard A.) (BR) 24(1)SR012(J/F1985)
Percutaneous angioscopy: methodological considerations (Ledor, Kobi; Ferris, Ernest J.; benAvi, Doron; Baker, Max L.; Robbins, Mark B.) 24(4)681-682(J/A1985)
Principles of a switching extensive fiber optic network (Meyrueis, Patrick; Pfeiffer, Pierre) 24(5)869-871(S/O1985)
Pulsed fiber holography: new technique for hologram interferometry (Bjelkhagen, Hans I.) 24(4)645-649(J/A1985)
Raman and four photon mixing amplification in single mode fibers (Pocholle, J. P.; Raffy, J.; Papuchon, M.; Desurvire, E.) 24(4)600-608(J/A1985)
Remote deformation field measurement through different media using fiber optics (Gilbert, J. A.; Dudderar, T. D.; Nose, A.) 24(4)628-631(J/A1985)
Removal of cations from zirconium to permit use in low loss fluoride optical fibers (Klein, Philipp H.; Nordquist, Paul E. R., Jr.; Singer, Arnold H.) 24(3)516-517(M/J1985)
Single crystal fibers by the laser heated pedestal growth method (Feigelson, R. S.; Kway, W. L.; Route, R. K.) 24(6)1102-1107(N/D1985)

Fibers, applications
Fiber displacement sensors for metrology and control (Johnson, Mark) 24(6)961-965(N/D1985)
Infrared fibers: an overview of prospective materials, fabrication methods, and applications (Bendow, Bernard; Rast, Howard; El-Bayoumi, Osama H.) 24(6)1072-1080(N/D1985)

Fibers, characterization
Single mode optical fiber characterization (Coppa, G.; Costa, B.; DiVita, P.; Rossi, U.) 24(4)676-680(J/A1985)

Fibers, single mode
Raman and four photon mixing amplification in single mode fibers (Pocholle, J. P.; Raffy, J.; Papuchon, M.; Desurvire, E.) 24(4)600-608(J/A1985)
Single mode optical fiber characterization (Coppa, G.; Costa, B.; DiVita, P.; Rossi, U.) 24(4)676-680(J/A1985)

Filters
Deconvolution with Applications in Spectroscopy. Edited by Peter A. Jansson. (Reviewed by Dewan, E. M.) (BR) 24(4)SR096-SR098(J/A1985)
Dynamic optical cross correlator using a liquid crystal light valve and a bismuth silicon oxide crystal in the Fourier plane (Loiseaux, B.; Illiaquer, G.; Huignard, J. P.) 24(1)144-149(J/F1985)
Holographic filters in dichromated gelatin position tuned over near infrared region (Duncan, S. S.; McQuoid, J. A.; McCartney, D. J.) 24(5)781-785(S/O1985)
Materials for acoustooptic devices, selection of (Chang, I. C.) 24(1)132-137(J/F1985)
Median filter as image preprocessor for machine recognition (Lai, D. C.; Verfaille, K.; Potenza, J.) 24(6)1030-1037(N/D1985)
Nonlinear guided wave applications (Seaton, C. T.; Mai, Xu; Stegeman, G. I.; Winful, H. G.) 24(4)593-599(J/A1985)

Flow
Automated reduction of instantaneous flow field images (Reynolds, G. A.; Short, M.; Whiffen, M. C.) 24(3)475-479(M/J1985)
Computational interferometric description of nested flow fields (Havener, A. George; Obergefell, L. A.)

24(3)441-445(M/J1985)
Digital fringe reduction techniques applied to measurement of three-dimensional transonic flow fields (Becker, Friedhelm; Yu, Yung H.) 24(3)429-434(M/J1985)
Moire deflectometry: a ray deflection approach to optical testing (Kafri, O.; Glatt, I.) 24(6)944-960(N/D1985)
Optical interferometry in fluid dynamics research (Bachalo, W. D.; Houser, M. J.) 24(3)455-461(M/J1985)

Fluorescence
Time resolved microfluorescence in biomedical diagnosis (Schneckenburger, Herbert) 24(6)1042-1044(N/D1985)

Four-wave mixing
Liquid crystals: nonlinear optical properties and processes (Khoo, I. C.; Shen, Y. R.) 24(4)579-585(J/A1985)
Wave mixing in photorefractive bismuth silicon oxide crystals and its applications (Huignard, J. P.; Rajbenbach, H.; Refregier, Ph.; Solymar, L.) 24(4)586-592(J/A1985)

Fourier transforms
Linked gas chromatography/Fourier transform infrared spectrometry/Fourier transform mass spectrometry for mixture analysis (Laude, David A., Jr.; Johlman, Carolyn; Wilkins, Charles L.) 24(6)1011-1013(N/D1985)
Particle field holography data reduction by Fourier transform analysis (Hess, Cecil F.; Trolinger, James D.) 24(3)470-474(M/J1985)
Two-dimensional Radon-Fourier transformer (Ticknor, Anthony J.; Easton, Roger L.; Barrett, Harrison H.) 24(1)082-085(J/F1985)

Frequency conversion
Raman and four photon mixing amplification in single mode fibers (Pocholle, J. P.; Raffy, J.; Papuchon, M.; Desurvire, E.) 24(4)600-608(J/A1985)

Fusion
Laser Interaction and Related Plasma Phenomena,Vol. 6. Edited by Heinrich Hora and George H. Miley. (Reviewed by Saito, Theodore T.) (BR) 24(1)SR014(J/F1985)

Gallium arsenide compounds
Evidence that room temperature optical bistability is excitonic in both bulk & multiple quantum well gallium arsenide (Ovadia, S.; Gibbs, H. M.; Jewell, J. L.; Sarid, D.; Peyghambarian, N.) 24(4)565-568(J/A1985)
Ion implanted optical waveguides in gallium arsenide (Mentzer, M. A.; Hunsperger, R. G.; Sriram, S.; Bartko, J.; Wlodawski, M. S.; Zavada, J. M.; Jenkinson, H. A.) 24(2)225-229(M/A1985)
Nonlinear optical properties of GaAs/GaAlAs multiple quantum well material: phenomena and applications (Chemla, D. S.; Miller, D. A. B.; Smith, P. W.) 24(4)556-564(J/A1985)
Optoelectronic switch matrices: recent developments (MacDonald, R. I.; Lam, D. K. W.) 24(2)220-224(M/A1985)
Photonics for integrated circuits and communications (Merz, James L.; Yuan, Y. R.; Vawter, G. A.) 24(2)214-219(M/A1985)

Gamma rays
Use of simulation data sets for assessing interlaboratory pattern recognition accuracy (Currie, L. A.) 24(6)1004-1008(N/D1985)

Gases
Spectral correlator technologies (Frankel, Donald S.; Camac, M.; Caulfield, H. John; Gozewski, C.; Kolb, C. E.) 24(6)996-1003(N/D1985)
Stratospheric Aerosol and Gas Experiment II instrument: a functional description (Mauldin, L. E., III; Zaun, N. H.; McCormick, M. Patrick, Jr.; Guy, J. H.; Vaughn, W. R.) 24(2)307-312(M/A1985)
Velocities of gases and plasmas from real time holographic interferograms (Deason, V. A.; Reynolds, L. D.; McIlwain, M. E.) 24(5)735-740(S/O1985)

Geometrical optics
Microwave and Optical Ray Geometry. By S. Cornbleet. (Reviewed by Moore, Duncan T.) (BR) 24(1)SR013-SR014(J/F1985)

Glass
Glass waveguides by ion exchange: a review (Findakly, T.) 24(2)244-250(M/A1985)
Infrared transmitting glass (Dumbaugh, William H.) 24(2)257-262(M/A1985)
Intrinsic instabilities of heavy metal fluoride glasses (Bruce, A. J.; Moynihan, C. T.; Loehr, S. R.; Opalka, S. M.; Mossadegh, R.; Perazzo, N. L.; Bansal, N. P.; Doremus, R. H.; Drexhage, Martin G.) 24(3)522-526(M/J1985)
Rayleigh and Brillouin scattering in heavy metal fluoride glasses: intrinsic Rayleigh scattering (Schroeder, John; Fox-Bilmont, Marsha; Pazol, Brian G.; Tsoukala, Veneta; Drexhage, Martin G.; El-Bayoumi, Osama H.) 24(4)697-703(J/A1985)
Removal of cations from zirconium to permit use in low loss fluoride optical fibers (Klein, Philipp H.; Nordquist, Paul E. R., Jr.; Singer, Arnold H.) 24(3)516-517(M/J1985)

Gradient index
Optical design of thermal imaging systems utilizing gradient-index optical materials (Howard, James W.; Ryan-Howard, Danette P.) 24(2)263-266(M/A1985)
Quantitative shadow method for measuring a one-dimensional refractive index distribution (Lewis, Robert W.) 24(6)1098-1101(N/D1985)

Gratings
Binary lenses for use at 10.6 micrometers (Swanson, Gary J.; Veldkamp, Wilfrid B.) 24(5)791-795(S/O1985)
Moire interferometry for deformation and strain studies (Post, Daniel) 24(4)663-667(J/A1985)
Nonlinear guided wave applications (Seaton, C. T.; Mai, Xu; Stegeman, G. I.; Winful, H. G.) 24(4)593-599(J/A1985)
Slope and deformation mapping by grating projection technique (Livnat, A.; Kafri, O.) 24(1)150-152(J/F1985)

Guided waves
Battelle's proposed cooperative program to develop guided wave optoelectronic manufacturing technology (Holman, Robert L.; Skinner, Doyle P.) 24(2)251-255(M/A1985)
Guided wave optical structures utilizing silicon (Boyd, J. T.; Wu, R. W.; Zelmon, D. E.; Naumaan, A.; Timlin, H. A.; Jackson, Howard E.) 24(2)230-234(M/A1985)
Nonlinear guided wave applications (Seaton, C. T.; Mai, Xu; Stegeman, G. I.; Winful, H. G.) 24(4)593-599(J/A1985)

Heterodyning
Differential laser heterodyne micrometrology (Wickramasinghe, H. K.) 24(6)926-929(N/D1985)
Electron tunneling devices in optics (Kale, B. Michael) 24(2)267-274(M/A1985)
Heterodyne and quasi-heterodyne holographic interferometry (Dandliker, R.; Thalmann, R.) 24(5)824-831(S/O1985)
Heterodyne holography applications in studies of small components (Pryputniewicz, Ryszard J.) 24(5)849-854(S/O1985)
Holographic contouring using electronic phase measurement (Thalmann, R.; Dandliker, R.) 24(6)930-935(N/D1985)

Heterojunctions
Heterojunction stripe geometry lead salt diode lasers grown by molecular beam epitaxy (Partin, D. L.) 24(2)367-370(M/A1985)

Heterostructures
Photonics for integrated circuits and communications (Merz, James L.; Yuan, Y. R.; Vawter, G. A.) 24(2)214-219(M/A1985)

Holograms, computer generated
Computer generated holograms in pattern recognition: a review (Casasent, David P.) 24(5)724-730(S/O1985)
Electron beam fabrication of computer-generated holograms (Arnold, Steven M.) 24(5)803-807(S/O1985)

Holography
Achromatic holographic stereogram of Landsat multispectral scanner data (Benton, Stephen A.; Duston-Roberge, D. A.; Simard, R.) 24(2)338-340(M/A1985)
Aero-optical turbulent boundary layer/shear layer experiment on the KC-135 aircraft revisited (Craig, James E.; Allen, C.) 24(3)446-454(M/J1985)
Algebraic reconstruction technique code for tomographic interferometry (Tan, H.; Modarress, D.) 24(3)435-440(M/J1985)
Application of pulsed reflection holography to material testing (vanRenesse, R. L.; Burgmeijer, J. W.) 24(6)1086-1092(N/D1985)
Automated analysis of particle holograms (Caulfield, H. John 24(3)462-463(M/J1985)
Automated data reduction in holographic interferometry (Trolinger, James D.) 24(5)840-842(S/O1985)
Comparative holography: technique for eliminating background fringes in holographic interferometry (Neumann, Don B.) 24(4)625-627(J/A1985)
Compensating and measuring any motion of three-dimensional objects in holographic interferometry, new method for (Stimpfling, A.; Smigielski, P.) 24(5)821-823(S/O1985)

Detection of short-lived particles using holography (Haridas, P.; Hafen, E.; Pless, I.; Harton, J.; Dixit, S.; Goloskie, D.; Benton, Stephen A.) 24(5)741-745(S/01985)
Heterodyne and quasi-heterodyne holographic interferometry (Dandliker, R.; Thalmann, R.) 24(5)824-831(S/01985)
Heterodyne holography applications in studies of small components (Pryputniewicz, Ryszard J.) 24(5)849-854(S/01985)
High speed holographic movie camera (Hentschel, W.; Lauterborn, W.) 24(4)687-691(J/A1985)
Hologram recording with a new photopolymer system (Ingwall, R. T.; Fielding, H. L.) 24(5)808-811(S/01985)
Holographic contouring using electronic phase measurement (Thalmann, R.; Dandliker, R.) 24(6)930-935(N/D1985)
Holographic filters in dichromated gelatin position tuned over near infrared region (Duncan, S. S.; McQuoid, J. A.; McCartney, D. J.) 24(5)781-785(S/01985)
Holographic fringe linearization interferometry for defect detection (Reynolds, George O.; Servaes, D. A.; Ramos-Izquierdo, L.; DeVelis, John B.; Pierce, D. C.; Hilton, P. D.; Mayville, R. A.) 24(5)757-768(S/01985)
Holographic honeycomb microlens (Cowan, James J.) 24(5)796-802(S/01985)
Holographic interferometry applications in external osteosynthesis (Jacquot, Pierre; Rastogi, Pramod K.; Pflug, L.) 24(5)918-924(S/01985)
Holographic interferometry: the 20th anniversary, Part II (Pryputniewicz, Ryszard J.) (Ed) 24(5)820(S/01985)
Holographic interferometry: the 20th anniversary, Part I (Pryputniewicz, Ryszard J.; Caulfield, H. John) (Ed) 24(4)624(J/A1985)
Holographic microscopy (Wuerker, Ralph F.; Hill, D. A.) 24(3)480-484(M/J1985)
Holographic mirrors (Magarinos, Jose R.; Coleman, Daniel J.) 24(5)769-780(S/01985)
Holographic optical processing for submicrometer defect detection (Fusek, Richard L.; Lin, L. H.; Harding, K.; Gustafson, Steven C.) 24(5)731-734(S/01985)
Holographic optical system for aberration corrections in laser Doppler velocimetry (Kim, Richard C.; Case, Steven K.; Schock, Harold J.) 24(5)786-790(S/01985)
Holography applied to inspection and measurement in an industrial environment (Tozer, B. A.; Glanville, R.; Gordon, A. L.; Little, M. J.; Webster, J. M.; Wright, D. G.) 24(5)746-753(S/01985)

Image and hologram data reduction (Trolinger, James D.) (Ed) 24(3)428(M/J1985)
Improved fringe carrier technique for unambiguous determination of holographically recorded displacements (Plotkowski, Paul D.; Hung, Yau Y.; Hovanesian, Joseph D.; Gerhart, Grant R.) 24(5)754-756(S/01985)
Magnesium doped lithium niobate for higher optical power applications (Bryan, D. A.; Rice, R. R.; Gerson, Robert; Tomaschke, H. E.; Sweeney, K. L.; Halliburton, L. E.) 24(1)138-143(J/F1985)
Multiplex holography: some new methods (Leith, Emmett N.; Voulgaris, P.) 24(1)171-175(J/F1985)
Optical interferometry in fluid dynamics research (Bachalo, W. D.; Houser, M. J.) 24(3)455-461(M/J1985)
Particle field holography data reduction by Fourier transform analysis (Hess, Cecil F.; Trolinger, James D.) 24(3)470-474(M/J1985)

Pulsed fiber holography: new technique for hologram interferometry (Bjelkhagen, Hans I.) 24(4)645-649(J/A1985)
Pulsed laser holography in studies of bone motions and deformations (Pryputniewicz, Ryszard J.) 24(5)832-839(S/01985)
Pulsed lasers for holographic interferometry (Pitlak, R. T.; Page, R.) 24(4)639-644(J/A1985)

Quasi-heterodyne hologram interferometry (Hariharan, P.) 24(4)632-638(J/A1985)
Remote deformation field measurement through different media using fiber optics (Gilbert, J. A.; Dudderar, T. D.; Nose, A.) 24(4)628-631(J/A1985)
Simplified static holographic evaluation method omitting the zero-order fringe (Puzessy, Z.; Wesolowski, P.) 24(6)1023-1025(N/D1985)
Three dimensional display based on thick holographic phase components (Bartelt, H.; Streibl, N.) 24(6)1038-1041(N/D1985)
Time average holography in vibration analysis (Pryputniewicz, Ryszard J.) 24(5)843-848(S/01985)
Velocities of gases and plasmas from real time holographic interferograms (Deason, V. A.; Reynolds, L. D.; McIlwain, M. E.) 24(5)735-740(S/01985)
White light transmission color holography: a review (Yu, Francis T. S.; Gerhart, Grant R.) 24(5)812-819(S/01985)

Holography, applications
Applications of holography (Huff, Lloyd) (Ed) 24(5)723(S/01985)
Detection of short-lived particles using holography (Haridas, P.; Hafen, E.; Pless, I.; Harton, J.; Dixit, S.; Goloskie, D.; Benton, Stephen A.) 24(5)741-745(S/01985)
Holographic fringe linearization interferometry for defect detection (Reynolds, George O.; Servaes, D. A.; Ramos-Izquierdo, L.; DeVelis, John B.; Pierce, D. C.; Hilton, P. D.; Mayville, R. A.) 24(5)757-768(S/01985)
Holography applied to inspection and measurement in an industrial environment (Tozer, B. A.; Glanville, R.; Gordon, A. L.; Little, M. J.; Webster, J. M.; Wright, D. G.) 24(5)746-753(S/01985)

Holography, color
White light transmission color holography: a review (Yu, Francis T. S.; Gerhart, Grant R.) 24(5)812-819(S/01985)

Holography, volume
Materials requirements for optical processing and computing devices (Tanguay, Armand R., Jr.) 24(1)002-018(J/F1985)
Physical characterization of the photorefractive incoherent to coherent optical converter (Marrakchi, A.; Tanguay, Armand R., Jr.; Yu, J.; Psaltis, Demetri) 24(1)124-131(J/F1985)

Image converters
Liquid-crystal-based visible-to-infrared dynamic image converter (Efron, Uzi; Wu, S. T.; Grinberg, Jan; Hess, L. D.) 24(1)111-118(J/F1985)

Image enhancement
Image sharpness enhancement using adaptive 3x3 convolution masks (Strickland, Robin N.; Aly, Maged Youssef) 24(4)683-686(J/A1985)
Spatial sharpening of Thematic Mapper data using a multiband approach (Tom, Victor T.; Carlotto, Mark J.; Scholten, Daniel K.) 24(6)1026-1029(N/D1985)

Image evaluation
Identification of unique objects in high resolution aerial images (Trivedi, Mohan M.; Harlow, Charles A.) 24(3)502-506(M/J1985)

Image processing
Achromatic holographic stereogram of Landsat multispectral scanner data (Benton, Stephen A.; Duston-Roberge, D. A.; Simard, R.) 24(2)338-340(M/A1985)
Adaptive selection of threshold matrix size for pseudogray rendition of images (Carlsohn, Matthias F.; Besslich, Philipp W.) 24(4)655-662(J/A1985)
Automated analysis of particle holograms (Caulfield, H. John 24(3)462-463(M/J1985)
Automated reduction of instantaneous flow field images (Reynolds, G. A.; Short, M.; Whiffen, M. C.) 24(3)475-479(M/J1985)
Consistency in time and frequency domains in presentation of measured infrared background data (Klein, Harold J.) 24(3)529-534(M/J1985)
Digital fringe reduction techniques applied to measurement of three-dimensional transonic flow fields (Becker, Friedhelm; Yu, Yung H.) 24(3)429-434(M/J1985)
Electronic image alignment: implementation and applications to imaging system design (Mord, Allan J.; Endsley, Neil H.; Ramberg, Eric; Reitsema, Harold J.) 24(3)507-515(M/J1985)
Holographic microscopy (Wuerker, Ralph F.; Hill, D. A.) 24(3)480-484(M/J1985)
Identification of unique objects in high resolution aerial images (Trivedi, Mohan M.; Harlow, Charles A.) 24(3)502-506(M/J1985)
Image and hologram data reduction (Trolinger, James D.) (Ed) 24(3)428(M/J1985)
Image processing system to analyze droplet distributions in sprays (Bertollini, Gary P.; Oberdier, Larry M.; Lee, Yong H.) 24(3)464-469(M/J1985)
Image sharpness enhancement using adaptive 3x3 convolution masks (Strickland, Robin N.; Aly, Maged Youssef) 24(4)683-686(J/A1985)
Interactive manipulation of three-dimensional data via two-dimensional display device (Chen, Lih-Shyang; Herman, Gabor T.; Hung, Hsiu-Mei; Levkowitz, Haim; Trivedi, Sushma S.; Udupa, Jayaram K.) 24(5)893-900(S/01985)
Median filter as image preprocessor for machine recognition (Lai, D. C.; Verfaille, K.; Potenza, J.) 24(6)1030-1037(N/D1985)
Microcomputer based digital image processing system developed to count and size laser-generated small particle

images (Ahlers, K. D.; Alexander, D. R.)
24(6)1060-1065(N/D1985)
Micromechanical light modulators on silicon (Brooks, Robert E.) 24(1)101-106(J/F1985)
Multiplexed moire interferometry with white light processing (Toms, Jay A.; Yu, Francis T. S.; Gerhart, Grant R.) 24(5)879-881(S/O1985)
Spatial sharpening of Thematic Mapper data using a multiband approach (Tom, Victor T.; Carlotto, Mark J.; Scholten, Daniel K.) 24(6)1026-1029(N/D1985)
Three-dimensional object representation in imaging systems (Laub, G. A.; Lenz, G.; Reinhardt, Erich R.) 24(5)901-905(S/O1985)
Tomography in image data compression: principles of (Fraser, Donald; Hunt, B. R.; Su, J. C.) 24(2)298-306(M/A1985)

Image reconstruction
Aero-optical turbulent boundary layer/shear layer experiment on the KC-135 aircraft revisited (Craig, James E.; Allen, C.) 24(3)446-454(M/J1985)
Algebraic reconstruction technique code for tomographic interferometry (Tan, H.; Modarress, D.) 24(3)435-440(M/J1985)
Holographic microscopy (Wuerker, Ralph F.; Hill, D. A.) 24(3)480-484(M/J1985)

Image recording
Photodeposition recording and display technology (Peled, A.) 24(4)717-718(J/A1985)

Image restoration
Image motion compensation through augmented collinearity equations (Ghosh, Sanjib K.) 24(6)1014-1017(N/D1985)
Real time restoration of image sensor photoresponse nonuniformity (Kleinemeier, B.) 24(1)160-170(J/F1985)

Imaging systems
Configurations for high speed gallium arsenide charge-coupled device imagers (Kosel, P. B.; Wilson, M. R.; Boyd, J. T.; King, L. A.) 24(1)176-182(J/F1985)
Differential laser heterodyne micrometrology (Wickramasinghe, H. K.) 24(6)926-929(N/D1985)
Electronic image alignment: implementation and applications to imaging system design (Mord, Allan J.; Endsley, Neil H.; Ramberg, Eric; Reitsema, Harold J.) 24(3)507-515(M/J1985)
Spaceborne processing of multispectral image data: evaluation of experimental system for (Meredith, Barry D.; Murray, Nicholas D.; LaBaugh, Robert J.; Aanstoos, James V.) 24(1)189-196(J/F1985)
Three-dimensional object representation in imaging systems (Laub, G. A.; Lenz, G.; Reinhardt, Erich R.) 24(5)901-905(S/O1985)
Virtual phase charge coupled device imager operated in frontside electron-bombarded mode (Everett, Paul; Hynecek, Jaroslav; Zucchino, Paul; Lowrance, John) 24(2)360-362(M/A1985)

Information processing
Dynamic optical cross correlator using a liquid crystal light valve and a bismuth silicon oxide crystal in the Fourier plane (Loiseaux, B.; Illiaquer, G.; Huignard, J. P.) 24(1)144-149(J/F1985)
Electron beam addressed microchannel spatial light modulator (Schwartz, A.; Wang, X-Y.; Warde, Cardinal) 24(1)119-123(J/F1985)
Infrared all-optical information processing in semiconductors (Garmire, Elsa) 24(4)575-578(J/A1985)
Liquid-crystal-based visible-to-infrared dynamic image converter (Efron, Uzi; Wu, S. T.; Grinberg, Jan; Hess, L. D.) 24(1)111-118(J/F1985)
Magnesium doped lithium niobate for higher optical power applications (Bryan, D. A.; Rice, R. R.; Gerson, Robert; Tomaschke, H. E.; Sweeney, K. L.; Halliburton, L. E.) 24(1)138-143(J/F1985)
Materials and devices for optical information processing (Warde, Cardinal; Efron, Uzi) (Ed) 24(1)092(J/F1985)
Materials for acoustooptic devices, selection of (Chang, I. C.) 24(1)132-137(J/F1985)
Materials requirements for optical processing and computing devices (Tanguay, Armand R., Jr.) 24(1)002-^18(J/F1985)
Micromechanical light modulators on silicon (Brooks, Robert E.) 24(1)101-106(J/F1985)
Optical information processing components (Tanguay, Armand R., Jr.; Warde, Cardinal) (Ed) 24(1)091(J/F1985)
Optically addressed membrane spatial light modulator (Pape, Dennis R.) 24(1)107-110(J/F1985)
Physical characterization of the photorefractive incoherent to coherent optical converter (Marrakchi, A.; Tanguay, Armand R., Jr.; Yu, J.; Psaltis, Demetri) 24(1)124-131(J/F1985)
Scophony spatial light modulator (Johnson, Richard V.; Guerin, Jean-Michel; Swanberg, Mel E.) 24(1)093-100(J/F1985)

Infrared
Aplanatic four spherical mirror system (Chung, Hai Bin; Lee, Sang Soo) 24(2)317-321(M/A1985)
Applied infrared presensitization photography (Geary, Joseph M.; Vunck, D.; Deuto, B.; Sessions, R.; Duneman, Dennis; Moeller, Charles E.; Wick, R.) 24(2)332-337(M/A1985)
Aspherics: precision manufacturing by vacuum evaporation (Angenieux, Jacques; Masson, Andre; Rouchouse, Yvon) 24(3)499-501(M/J1985)
Binary lenses for use at 10.6 micrometers (Swanson, Gary J.; Veldkamp, Wilfrid B.) 24(5)791-795(S/O1985)
Consistency in time and frequency domains in presentation of measured infrared background data (Klein, Harold J.) 24(3)529-534(M/J1985)
Cryogenic servo-controlled infrared Fabry-Perot spectrometer (Smith, Howard A.; Fischer, Jacqueline; Waltman, William B.; Russell, Ray W.; Wollman, Eric R.; Albert, Elise; Stuart, Frank E.) 24(2)275-284(M/A1985)
Effective radiant steradance computation (Johnson, R. Barry) 24(4)721(J/A1985)
Electron tunneling devices in optics (Kale, B. Michael) 24(2)267-274(M/A1985)
Holographic filters in dichromated gelatin position tuned over near infrared region (Duncan, S. S.; McQuoid, J. A.; McCartney, D. J.) 24(5)781-785(S/O1985)
Influence of nonuniformity on infrared focal plane array performance (Milton, A. F.; Barone, F. R.; Kruer, M. R.) 24(5)855-862(S/O1985)
Infrared all-optical information processing in semiconductors (Garmire, Elsa) 24(4)575-578(J/A1985)
Infrared fibers: an overview of prospective materials, fabrication methods, and applications (Bendow, Bernard; Rast, Howard; El-Bayoumi, Osama H.) 24(6)1072-1080(N/D1985)
Infrared optics (Armstrong, Scott A.; Wallace, Nelson W.) (Ed) 24(2)256(M/A1985)
Infrared presensitization photography and the characteristic curve (Geary, Joseph M.) 24(4)704-706(J/A1985)
Infrared presensitization photography and spectral sensitivity (Geary, Joseph M.) 24(5)913-917(S/O1985)
Infrared transmitting glass (Dumbaugh, William H.) 24(2)257-262(M/A1985)
Interference sources in infrared systems operating in closed spaces (Georgopoulos, Chris J.) (PC) 24(3)SR062-SR066(M/J1985)
Ion implanted optical waveguides in gallium arsenide (Mentzer, M. A.; Hunsperger, R. G.; Sriram, S.; Bartko, J.; Wlodawski, M. S.; Zavada, J. M.; Jenkinson, H. A.) 24(2)225-229(M/A1985)
Limitations of light propagation in infrared optical fibers: theoretical overview (Klocek, Paul; Sparks, Marshall) 24(6)1093-1097(N/D1985)
Linked gas chromatography/Fourier transform infrared spectrometry/Fourier transform mass spectrometry for mixture analysis (Laude, David A., Jr.; Johlman, Carolyn; Wilkins, Charles L.) 24(6)1011-1013(N/D1985)
Long-wave Optics: the Science and Technology of Infrared and Near-millimetre Waves, Vol. 1 Principles and Vol. 2 Applications. By George W. Chantry. (Reviewed by Johnson, Norman J. E.) (BR) 24(6)SR152(N/D1985)
New molecular transmission band models for LOWTRAN (Pierluissi, Joseph H.; Peng, Gung-Shyong) 24(3)541-547(M/J1985)
Removal of cations from zirconium to permit use in low loss fluoride optical fibers (Klein, Philipp H.; Nordquist, Paul E. R., Jr.; Singer, Arnold H.) 24(3)516-517(M/J1985)
Spatial sharpening of Thematic Mapper data using a multiband approach (Tom, Victor T.; Carlotto, Mark J.; Scholten, Daniel K.) 24(6)1026-1029(N/D1985)
Ten micrometer infrared light emitting diodes for radiometric sources (Linden, K. J.; Palmacci, S. T.) 24(4)719-720(J/A1985)
Test of jet engine turbine blades by thermography (Ding, Kurt) 24(6)1055-1059(N/D1985)
Thermal emissivity of diatheranous materials (Munis, R. H.; Marshall, S. J.) 24(5)872-878(S/O1985)
Three mirror wide field optical system: manufacture of a (Egdall, Ira M.) 24(2)285-289(M/A1985)

Integrated circuits
Guided wave optical structures utilizing silicon (Boyd, J. T.; Wu, R. W.; Zelmon, D. E.; Nauman, A.; Timlin, H. A.; Jackson, Howard E.) 24(2)230-234(M/A1985)

Integrated optical architectures for matrix multiplication (Verber, Carl M.) 24(1)019-025(J/P1985)
Ion implanted optical waveguides in gallium arsenide (Mentzer, M. A.; Hunsperger, R. G.; Sriram, S.; Bartko, J.; Wlodawski, M. S.; Zavada, J. M.; Jenkinson, H. A.) 24(2)225-229(M/A1985)
Photonics for integrated circuits and communications (Merz, James L.; Yuan, Y. R.; Vawter, G. A.) 24(2)214-219(M/A1985)

Integrated optics
Glass waveguides by ion exchange: a review (Findakly, T.) 24(2)244-250(M/A1985)
Guided wave optical structures utilizing silicon (Boyd, J. T.; Wu, R. W.; Zelmon, D. E.; Naumaan, A.; Timlin, H. A.; Jackson, Howard E.) 24(2)230-234(M/A1985)
Integrated lenses on silicon nitride waveguides (Gidon, P.; Valette, S.; Mottier, P.) 24(2)235-240(M/A1985)
Integrated optical architectures for matrix multiplication (Verber, Carl M.) 24(1)019-025(J/P1985)
Integrated optical circuit engineering (Sriram, S.) (Ed) 24(2)213(M/A1985)
Optics and Lasers Including Fibers and Integrated Optics. By M. Young. (Reviewed by Ross, Douglas A.) (BR) 24(4)SR099(J/P1985)
Optoelectronic switch matrices: recent developments (MacDonald, R. I.; Lam, D. K. W.) 24(2)220-224(M/A1985)
Photonics for integrated circuits and communications (Merz, James L.; Yuan, Y. R.; Vawter, G. A.) 24(2)214-219(M/A1985)

Interferometers
Cryogenic servo-controlled infrared Fabry-Perot spectrometer (Smith, Howard A.; Fischer, Jacqueline; Waltman, William B.; Russell, Ray W.; Wollman, Eric R.; Albert, Elise; Stuart, Frank E.) 24(2)275-284(M/A1985)
Fiber optic sensors: an overview (Davis, Charles M.) 24(2)347-351(M/A1985)

Interferometry
Algebraic reconstruction technique code for tomographic interferometry (Tan, H.; Modarress, D.) 24(3)435-440(M/J1985)
Automated data reduction in holographic interferometry (Trolinger, James D.) 24(5)840-842(S/O1985)
Comparative holography: technique for eliminating background fringes in holographic interferometry (Neumann, Don B.) 24(4)625-627(J/A1985)
Compensating and measuring any motion of three-dimensional objects in holographic interferometry, new method for (Stimpfling, A.; Smigielski, P.) 24(5)821-823(S/O1985)
Computational interferometric description of nested flow fields (Havener, A. George; Obergefell, L. A.) 24(3)441-445(M/J1985)
Digital fringe reduction techniques applied to measurement of three-dimensional transonic flow fields (Becker, Friedhelm; Yu, Yung H.) 24(3)429-434(M/J1985)
Heterodyne and quasi-heterodyne holographic interferometry (Dandliker, R.; Thalmann, R.) 24(5)824-831(S/O1985)
Heterodyne holography applications in studies of small components (Pryputniewicz, Ryszard J.) 24(5)849-854(S/O1985)
Holographic fringe linearization interferometry for defect detection (Reynolds, George O.; Servaes, D. A.; Ramos-Izquierdo, L.; DeVelis, John B.; Pierce, D. C.; Hilton, P. D.; Mayville, R. A.) 24(5)757-768(S/O1985)
Holographic interferometry applications in external osteosynthesis (Jacquot, Pierre; Rastogi, Pramod K.; Pflug, L.) 24(5)918-924(S/O1985)
Holographic interferometry: the 20th anniversary, Part I (Pryputniewicz, Ryszard J.; Caulfield, H. John) (Ed) 24(4)624(J/A1985)
Holographic interferometry: the 20th anniversary, Part II (Pryputniewicz, Ryszard J.) (Ed) 24(5)820(S/O1985)
Improved fringe carrier technique for unambiguous determination of holographically recorded displacements (Plotkowski, Paul D.; Hung, Yau Y.; Hovanesian, Joseph D.; Gerhart, Grant R.) 24(5)754-756(S/O1985)
Mapping of in-plane vibration modes by electronic speckle pattern interferometry (Lokberg, Ole J.) 24(2)356-359(M/A1985)
Moire deflectometry: a ray deflection approach to optical testing (Kafri, O.; Glatt, I.) 24(6)944-960(N/D1985)
Moire interferometry for deformation and strain studies (Post, Daniel) 24(4)663-667(J/A1985)
Multiplexed moire interferometry with white light processing (Tome, Jay A.; Yu, Francis T. S.; Gerhart, Grant R.) 24(5)879-881(S/O1985)
Optical interferometry in fluid dynamics research (Bachalo, W. D.; Houser, M. J.) 24(3)455-461(M/J1985)
Pulsed fiber holography: new technique for hologram interferometry (Bjelkhagen, Hans I.) 24(4)645-649(J/A1985)
Pulsed laser holography in studies of bone motions and deformations (Pryputniewicz, Ryszard J.) 24(5)832-839(S/O1985)
Pulsed lasers for holographic interferometry (Pitlak, R. T.; Page, R.) 24(4)639-644(J/A1985)
Quasi-heterodyne hologram interferometry (Hariharan, P.) 24(4)632-638(J/A1985)
Random (speckle) patterns for displacement and strain measurement: some recent advances (Chiang, F. P.; Li, D. W.) 24(6)936-943(N/D1985)
Remote deformation field measurement through different media using fiber optics (Gilbert, J. A.; Dudderar, T. D.; Nose, A.) 24(4)628-631(J/A1985)
Simplified static holographic evaluation method omitting the zero-order fringe (Fuzessy, Z.; Wesolowski, P.) 24(6)1023-1025(N/D1985)
Time average holography in vibration analysis (Pryputniewicz, Ryszard J.) 24(5)843-848(S/O1985)
Velocities of gases and plasmas from real time holographic interferograms (Deason, V. A.; Reynolds, L. D.; McIlwain, M. E.) 24(5)735-740(S/O1985)

Laser chemistry
Laser Applications, Vol. 5. Edited by John F. Ready and Robert K. Erf. (Reviewed by Woodin, R. L.) (BR) 24(6)SR150-SR152(N/D1985)

Laser-induced fluorescence
Time resolved microfluorescence in biomedical diagnosis (Schneckenburger, Herbert) 24(6)1042-1044(N/D1985)

Lasers
Beam Weapons: the Next Arms Race. By Jeff Hecht. (Reviewed by Lin, Herbert) (BR) 24(6)SR156(N/D1985)
Differential laser heterodyne micrometrology (Wickramasinghe, H. K.) 24(6)926-929(N/D1985)
Holographic honeycomb microlens (Cowan, James J.) 24(5)796-802(S/O1985)
Ion Implantation and Beam Processing. Edited by J. S. Williams and J. M. Poate. (Reviewed by Stinespring, Charter D.) (BR) 24(5)SR120(S/O1985)
Laser Interaction and Related Plasma Phenomena, Vol. 6. Edited by Heinrich Hora and George H. Miley. (Reviewed by Saito, Theodore T.) (BR) 24(1)SR014(J/P1985)
Optics and Lasers Including Fibers and Integrated Optics. By M. Young. (Reviewed by Ross, Douglas A.) (BR) 24(4)SR099(J/P1985)
Pulsed laser holography in studies of bone motions and deformations (Pryputniewicz, Ryszard J.) 24(5)832-839(S/O1985)

Lasers, applications
Laser Applications, Vol. 5. Edited by John F. Ready and Robert K. Erf. (Reviewed by Woodin, R. L.) (BR) 24(6)SR150-SR152(N/D1985)
Microcomputer based digital image processing system developed to count and size laser-generated small particle images (Ahlers, K. D.; Alexander, D. R.) 24(6)1060-1065(N/D1985)
Single crystal fibers by the laser heated pedestal growth method (Feigelson, R. S.; Kway, W. L.; Route, R. K.) 24(6)1102-1107(N/D1985)

Lasers, argon
High speed holographic movie camera (Hentschel, W.; Lauterborn, W.) 24(4)687-691(J/A1985)

Lasers, diode
Heterojunction stripe geometry lead salt diode lasers grown by molecular beam epitaxy (Partin, D. L.) 24(2)367-370(M/A1985)

Lasers, dye
Laser Dyes: Properties of Organic Compounds for Dye Lasers. By Mitsuo Maeda. (Reviewed by Steppel, Richard N.) (BR) 24(5)SR120(S/O1985)
Pulse modulation of an excimer pumped dye laser (Efthimiopoulos, T.) 24(5)906-907(S/O1985)

Lasers, excimer
Pulse modulation of an excimer pumped dye laser (Efthimiopoulos, T.) 24(5)906-907(S/O1985)

Lasers, free electron
Free Electron Lasers. By Thomas C. Marshall. (Reviewed by Gold, S. H.) (BR) 24(5)SR118-SR120(S/O1985)

Lasers, high energy
Applied infrared presensitization photography (Geary, Joseph M. Vunck, D.; Deuto, B.; Sessions, R.; Duneman, Dennis; Moeller, Charles E.; Wick, R.) 24(2)332-337(M/A1985)

Lasers, infrared
Long-wave Optics: the Science and Technology of Infrared and Near-millimetre Waves, Vol. 1 Principles and Vol. 2 Applications. By George W. Chantry. (Reviewed by Johnson, Norman J. E.) (BR) 24(6)SR152(N/D1985)

Lasers, neodymium
Aero-optical turbulent boundary layer/shear layer experiment on the KC-135 aircraft revisited (Craig, James E.; Allen, C.) 24(3)446-454(M/J1985)
Pulsed lasers for holographic interferometry (Pitlak, R. T.; Page, R.) 24(4)639-644(J/A1985)

Lasers, ruby
Pulsed lasers for holographic interferometry (Pitlak, R. T.; Page, R.) 24(4)639-644(J/A1985)

Lenses
Aspherics: precision manufacturing by vacuum evaporation (Angenieux, Jacques; Masson, Andre; Rouchouse, Yvon) 24(3)499-501(M/J1985)
Binary lenses for use at 10.6 micrometers (Swanson, Gary J.; Veldkamp, Wilfrid B.) 24(5)791-795(S/O1985)
Holographic honeycomb microlens (Cowan, James J.) 24(5)796-802(S/O1985)
Integrated lenses on silicon nitride waveguides (Gidon, P.; Valette, S.; Mottier, P.) 24(2)235-240(M/A1985)

Lidar
Optical Remote Sensing of Air Pollution. Edited by P. Camagni and S. Sandroni. (Reviewed by Menyuk, Norman) (BR) 24(2)SR041-SR042(M/A1985)

Linear discriminant analysis
Generalized singular value decomposition and discriminant analysis (Gruninger, John) 24(6)991-995(N/D1985)
Microprocessor controlled chemical detection and alarm system based on ion mobility spectrometry (Roehl, Joseph E.) 24(6)985-990(N/D1985)

Lithium niobate
Long wavelength titanium-doped lithium niobate directional coupler optical switches and switch arrays (McCaughan, L.) 24(2)241-243(M/A1985)

Lithography
Binary lenses for use at 10.6 micrometers (Swanson, Gary J.; Veldkamp, Wilfrid B.) 24(5)791-795(S/O1985)
Electron beam fabrication of computer-generated holograms (Arnold, Steven M.) 24(5)803-807(S/O1985)

Local area networks
Optical computer switching network (Clymer, B.; Collins, Stuart A., Jr.) 24(1)074-081(J/F1985)
Principles of a switching extensive fiber optic network (Meyrueis, Patrick; Pfeiffer, Pierre) 24(5)869-871(S/O1985)

Logic devices
Nonlinear optical circuit elements as logic gates for optical computers: the first digital optical circuits (Smith, S. D.; Janossy, I.; MacKenzie, H. A.; Mathew, J. G. H.; Reid, J. J. E.; Taghizadeh, M. R.; Tooley, F. A. P.; Walker, A. C.) 24(4)569-574(J/A1985)
Optical bistability for optical signal processing and computing (Peyghambarian, N.; Gibbs, H. M.) 24(1)068-073(J/F1985)
Optical computer switching network (Clymer, B.; Collins, Stuart A., Jr.) 24(1)074-081(J/F1985)
Optical digital truth table look-up processing (Gaylord, Thomas K.; Mirsalehi, M. M.; Guest, C. C.) 24(1)048-058(J/F1985)

Machine vision
Optical three-dimensional sensing for machine vision (Strand, Timothy C.) 24(1)033-040(J/F1985)

Materials
Application of pulsed reflection holography to material testing (vanRenesse, R. L.; Burgmeijer, J. W.) 24(6)1086-1092(N/D1985)
Thermal emissivity of diathermanous materials (Munis, R. H.; Marshall, S. J.) 24(5)872-878(S/O1985)

Matrix multiplication
Convolver-based optical systolic processing architectures (Cartwright, Steven; Gustafson, Steven C.) 24(1)059-064(J/F1985)
Integrated optical architectures for matrix multiplication (Verber, Carl M.) 24(1)019-025(J/F1985)
Optical computer switching network (Clymer, B.; Collins, Stuart A., Jr.) 24(1)074-081(J/F1985)

Mechanics
Heterodyne holography applications in studies of small components (Pryputniewicz, Ryszard J.) 24(5)849-854(S/O1985)
Holographic interferometry applications in external osteosynthesis (Jacquot, Pierre; Rastogi, Pramod K.; Pflug, L.) 24(5)918-924(S/O1985)
Real time control of spindle runout (Bifano, T. G.; Dow, T. A.) 24(5)888-892(S/O1985)
Test of jet engine turbine blades by thermography (Ding, Kurt) 24(6)1055-1059(N/D1985)

Medicine
Automatic interpretation of electroencephalograms by means of an expert system (Jansen, Ben H.) 24(6)1009-1010(N/D1985)
Fiber optic angioscopes (D'Amelio, Frank D.; DeLisi, Steven T.; Rega, Anthony) 24(4)672-675(J/A1985)
Holographic interferometry applications in external osteosynthesis (Jacquot, Pierre; Rastogi, Pramod K.; Pflug, L.) 24(5)918-924(S/O1985)
Interactive manipulation of three-dimensional data via two-dimensional display device (Chen, Lih-Shyang; Herman, Gabor T.; Hung, Hsiu-Mei; Levkowitz, Haim; Trivedi, Sushma S.; Udupa, Jayaram K.) 24(5)893-900(S/O1985)
Percutaneous angioscopy: methodological considerations (Ledor, Kobi; Ferris, Ernest J.; benAvi, Doron; Baker, Max L.; Robbins, Mark B.) 24(4)681-682(J/A1985)
Pulsed laser holography in studies of bone motions and deformations (Pryputniewicz, Ryszard J.) 24(5)832-839(S/O1985)
Time resolved microfluorescence in biomedical diagnosis (Schneckenburger, Herbert) 24(6)1042-1044(N/D1985)

Meteorology
Impact of satellite temperature sounding and wind data on numerical weather prediction (Atlas, R.; Kalnay, E.; Halem, M.) 24(2)341-346(M/A1985)
Remote Sounding of Atmospheres (Cambridge Planetary Science Series, Vol. 5). By J. T. Houghton, F. W. Taylor, and C. D. Rodgers. (Reviewed by Orton, Glen S.) (BR) 24(3)SR066-SR067(M/J1985)

Metrology
Analysis of linewidth measurement techniques for the purpose of automation (Kirk, C. P.; Moore, D. S.; Nelson, J. C. C.) 24(4)650-654(J/A1985)
Application of pulsed reflection holography to material testing (vanRenesse, R. L.; Burgmeijer, J. W.) 24(6)1086-1092(N/D1985)
Calibration and use of optical straightedges in the metrology of precision machines (Estler, W. Tyler) 24(3)372-379(M/J1985)
Differential laser heterodyne micrometrology (Wickramasinghe, H. K.) 24(6)926-929(N/D1985)
Fiber displacement sensors for metrology and control (Johnson, Mark) 24(6)961-965(N/D1985)
Fiber optic sensors: an overview (Davis, Charles M.) 24(2)347-351(M/A1985)
Finish characteristics of machined optical surfaces: survey of the (Church, Eugene L.; Takacs, P. Z.) 24(3)396-403(M/J1985)
Heterodyne and quasi-heterodyne holographic interferometry (Dandliker, R.; Thalmann, R.) 24(5)824-831(S/O1985)
Heterodyne holography applications in studies of small components (Pryputniewicz, Ryszard J.) 24(5)849-854(S/O1985)
High speed holographic movie camera (Hentschel, W.; Lauterborn, W.) 24(4)687-691(J/A1985)
Holography applied to inspection and measurement in an industrial environment (Tozer, B. A.; Glanville, R.; Gordon, A. L.; Little, M. J.; Webster, J. M.; Wright, D. G.) 24(5)746-753(S/O1985)
Improved fringe carrier technique for unambiguous determination of holographically recorded displacements (Plotkowski, Paul D.; Hung, Yau Y.; Hovanesian, Joseph D.; Gerhart, Grant R.) 24(5)754-756(S/O1985)
Measurement of low angle scatter (Stover, John C.; Cady, Fredrick M.; Sklar, Edward) 24(3)404-407(M/J1985)
Measuring roughness of optical surfaces: comparison of techniques for (Bennett, Jean M.) 24(3)380-387(M/J1985)

Mechanical and optical measurements of finish of precision machined optical surfaces: direct comparison of (Church, Eugene L.; Vorburger, Theodore V.; Wyant, James C.) 24(3)388-395(M/J1985)
Moire deflectometry: a ray deflection approach to optical testing (Kafri, O.; Glatt, I.) 24(6)944-960(N/D1985)
Moire interferometry for deformation and strain studies (Post, Daniel) 24(4)663-667(J/A1985)
Optical roughness measuring instrument for fine machined surfaces (Brodmann, Rainer; Gerstorfer, Oskar; Thurn, Gerd) 24(3)408-413(M/J1985)
Quasi-heterodyne hologram interferometry (Hariharan, P.) 24(4)632-638(J/A1985)
Random (speckle) patterns for displacement and strain measurement: some recent advances (Chiang, F. P.; Li, D. W.) 24(6)936-943(N/D1985)
Remote deformation field measurement through different media using fiber optics (Gilbert, J. A.; Dudderar, T. D.; Nose, A.) 24(4)628-631(J/A1985)
Simplified static holographic evaluation method omitting the zero-order fringe (Fuzessy, Z.; Wesolowski, P.) 24(6)1023-1025(N/D1985)
Slope and deformation mapping by grating projection technique (Livnat, A.; Kafri, O.) 24(1)150-152(J/F1985)
Specification and control of surface finish: empiricism vs dogmatism (Stout, K. J.; Obray, C.; Jungles, J.) 24(3)414-418(M/J1985)
Standardized total integrated scatter measurements of optical surfaces (Detrio, John A.; Miner, Susan M.) 24(3)419-422(M/J1985)
Surface metrology (Vorburger, Theodore V.) (Ed) 24(3)371(M/J1985)
Three-dimensional inspection using multistripe structured light (Jalkio, Jeffrey A.; Kim, Richard C.; Case, Steven K.) 24(6)966-974(N/D1985)
Triangulation with expanded range of depth (Bickel, G.; Hausler, G.; Maul, M.) 24(6)975-977(N/D1985)
White light method: new sensor for optical evaluation of rough surfaces (Ahlers, R.-J.) 24(3)423-427(M/J1985)

Microoptics
Fundamentals of Microoptics: Distributed-Index, Microlens, and Stacked Planar Optics. By K. Iga, Y. Kokubun, and M. Oikawa. (Reviewed by Marcuse, Dietrich) (BR) 24(6)SR152-SR154(N/D1985)

Microscopes
Imaging biological compounds using the coherent antiStokes Raman scattering microscope (Duncan, M. D.; Reintjes, J.; Manuccia, T. J.) 24(2)352-355(M/A1985)

Microscopy
Analysis of linewidth measurement techniques for the purpose of automation (Kirk, C. P.; Moore, D. S.; Nelson, J. C. C.) 24(4)650-654(J/A1985)
Differential laser heterodyne micrometrology (Wickramasinghe, H. K.) 24(6)926-929(N/D1985)
Holographic microscopy (Wuerker, Ralph F.; Hill, D. A.) 24(3)480-484(M/J1985)
Nondestructive refractive index characterization of optical fibers using phase contrast scanning optical microscope (Ball, S.) 24(3)518-521(M/J1985)

Millimeter waves
Millimeter Components and Techniques, Part II. Edited by Kenneth J. Button. (Reviewed by Tricoles, Gus) (BR) 24(4)SR098(J/A1985)
Millimeter Components and Techniques, Part III. Edited by Kenneth J. Button. (Reviewed by Tricoles, Gus) (BR) 24(6)SR154-SR156(N/D1985)

Mirrors
Aberrations of the Mangin mirror (Gelles, Rubin) 24(2)322-325(M/A1985)
Aplanatic four spherical mirror system (Chung, Hai Bin; Lee, Sang Soo) 24(2)317-321(M/A1985)
Elimination of clover in machining of off-centered conic mirrors (Yoder, R. C.) 24(3)485-496(M/J1985)
Holographic mirrors (Magarinos, Jose R.; Coleman, Daniel J.) 24(5)769-780(S/O1985)
Mangin mirror performance for optical processing with feedback: experimental evaluation of (Fainman, Y.; Lee, Sing H.) 24(3)535-540(M/J1985)
Multiple reflection polarizers using dielectric coated metallic mirrors (Thone, Tracy F.; Azzam, R. M. A.) 24(1)202-206(J/F1985)
Nonreversible mirrors equivalent to saddle mirrors (Murty, M. V. R. K.) 24(2)329-331(M/A1985)
Optical system equivalent to a variable power saddle mirror (Murty, M. V. R. K.) 24(3)497-498(M/J1985)
Optically addressed membrane spatial light modulator (Pape, Dennis R.) 24(1)107-110(J/F1985)
Soft x-ray optics using multilayer mirrors (Lee, Ping; Bartlett, Roger J.; Kania, Don R.) 24(1)197-201(J/F1985)
Three mirror wide field optical system: manufacture of a (Egdall, Ira M.) 24(2)285-289(M/A1985)

Modulation
Pulse modulation of an excimer pumped dye laser (Efthimiopoulos, T.) 24(5)906-907(S/O1985)
Self-steepening and self-modulation of optical beams in the spinor theory of light (Hillion, P.; Quinnez, S.) 24(1)153-159(J/F1985)

Modulation transfer function
Moire deflectometry: a ray deflection approach to optical testing (Kafri, O.; Glatt, I.) 24(6)944-960(N/D1985)
Optical scanner for linear arrays (Finkel, Mitchell; Kalshoven, James, Jr.; Leone, Peter; Strange, Maxwell) 24(2)313-316(M/A1985)

Modulators
Magnesium doped lithium niobate for higher optical power applications (Bryan, D. A.; Rice, R. R.; Gerson, Robert; Tomaschke, H. E.; Sweeney, K. L.; Halliburton, L. E.) 24(1)138-143(J/F1985)
Materials for acoustooptic devices, selection of (Chang, I. C.) 24(1)132-137(J/F1985)
Micromechanical light modulators on silicon (Brooks, Robert E.) 24(1)101-106(J/F1985)
Scophony spatial light modulator (Johnson, Richard V.; Guerin, Jean-Michel; Swanberg, Mel E.) 24(1)093-100(J/F1985)

Moire patterns
Moire deflectometry: a ray deflection approach to optical testing (Kafri, O.; Glatt, I.) 24(6)944-960(N/D1985)
Moire interferometry for deformation and strain studies (Post, Daniel) 24(4)663-667(J/A1985)
Multiplexed moire interferometry with white light processing (Tome, Jay A.; Yu, Francis T. S.; Gerhart, Grant R.) 24(5)879-881(S/O1985)
Slope and deformation mapping by grating projection technique (Livnat, A.; Kafri, O.) 24(1)150-152(J/F1985)

Molecules
Multiphoton Spectroscopy of Molecules. By S. H. Lin, Y. Fujimura, H. J. Neusser, and E. W. Schlag; edited by Paul F. Liao and Paul Kelley. (Reviewed by Djeu, N.) (BR) 24(2)SR038(M/A1985)
Spectral correlator technologies (Frankel, Donald S.; Camac, M.; Caulfield, H. John; Gozewski, C.; Kolb, C. E.) 24(6)996-1003(N/D1985)

Monochromators
Offner 1:1 system: some further uses (Murty, M. V. R. K.) 24(2)326-328(M/A1985)

Multiphoton processes
Multiphoton Spectroscopy of Molecules. By S. H. Lin, Y. Fujimura, H. J. Neusser, and E. W. Schlag; edited by Paul F. Liao and Paul Kelley. (Reviewed by Djeu, N.) (BR) 24(2)SR038(M/A1985)
Raman and four photon mixing amplification in single mode fibers (Pocholle, J. P.; Raffy, J.; Papuchon, M.; Desurvire, E.) 24(4)600-608(J/A1985)

Multiplexing
Holographic filters in dichromated gelatin position tuned over near infrared region (Duncan, S. S.; McQuoid, J. A.; McCartney, D. J.) 24(5)781-785(S/O1985)
Multiplex holography: some new methods (Leith, Emmett N.; Voulgaris, P.) 24(1)171-175(J/F1985)
Multiplexed moire interferometry with white light processing (Tome, Jay A.; Yu, Francis T. S.; Gerhart, Grant R.) 24(5)879-881(S/O1985)

Nerve agents
Spectral signatures of chemical agents and simulants (Hoffland, Lynn D.; Piffath, Ronald J.; Bouck, James B.) 24(6)982-984(N/D1985)

Nondestructive testing
Comparative holography: technique for eliminating background fringes in holographic interferometry (Neumann, Don B.) 24(4)625-627(J/A1985)

Holographic fringe linearization interferometry for defect detection (Reynolds, George O.; Servaes, D. A.; Ramos-Izquierdo, L.; DeVelis, John B.; Pierce, D. C.; Hilton, P. D.; Mayville, R. A.) 24(5)757-768(S/O1985)
Nondestructive refractive index characterization of optical fibers using phase contrast scanning optical microscope (Ball, S.) 24(3)518-521(M/J1985)
Test of jet engine turbine blades by thermography (Ding, Kurt) 24(6)1055-1059(N/D1985)
Three-dimensional sensing for inspection (Strand, Timothy C. (Ed) 24(6)925(N/D1985)

Nonlinear optics
Evidence that room temperature optical bistability is excitonic in both bulk & multiple quantum well gallium arsenide (Ovadia, S.; Gibbs, H. M.; Jewell, J. L.; Sarid, D.; Peyghambarian, N.) 24(4)565-568(J/A1985)
Infrared all-optical information processing in semiconductors (Garmire, Elsa) 24(4)575-578(J/A1985)
Intensity dependent index of refraction in organic materials (Carter, G. M.; Chen, Y. J.; Tripathy, S. K.) 24(4)609-612(J/A1985)
Limitations of light propagation in infrared optical fibers: theoretical overview (Klocek, Paul; Sparks, Marshall) 24(6)1093-1097(N/D1985)
Liquid crystals: nonlinear optical properties and processes (Khoo, I. C.; Shen, Y. R.) 24(4)579-585(J/A1985)
Nonlinear guided wave applications (Seaton, C. T.; Mai, Xu; Stegeman, G. I.; Winful, H. G.) 24(4)593-599(J/A1985)
Nonlinear optical circuit elements as logic gates for optical computers: the first digital optical circuits (Smith, S. D.; Janossy, I.; MacKenzie, H. A.; Mathew, J. G. H.; Reid, J. J. E.; Taghizadeh, M. R.; Tooley, F. A. P.; Walker, A. C.) 24(4)569-574(J/A1985)
Nonlinear optical materials, devices, and applications (Dagenais, Mario; Seymour, Robert J.) (Ed) 24(4)555(J/A1985)
Nonlinear optical properties of GaAs/GaAlAs multiple quantum well material: phenomena and applications (Chemla, D. S.; Miller, D. A. B.; Smith, P. W.) 24(4)556-564(J/A1985)
Photoconductive detectors employing an optically induced nonlinear resistance (Dean, A. B.; Elliott, C. T.; White, A. M.) 24(4)668-671(J/A1985)
Principles of Nonlinear Optics. By Y. R. Shen. (Reviewed by Valley, George C.) (BR) 24(3)SR067-SR068(M/J1985)
Raman and four photon mixing amplification in single mode fibers (Pocholle, J. P.; Raffy, J.; Papuchon, M.; Desurvire, E.) 24(4)600-608(J/A1985)
Self-steepening and self-modulation of optical beams in the spinor theory of light (Hillion, P.; Quinnez, S.) 24(1)153-159(J/F1985)
Self-trapping using the spinor wave equation: analysis of (Hillion, P.; Quinnez, S.) 24(2)290-297(M/A1985)
Two photon absorption, nonlinear refraction, and optical limiting in semiconductors (VanStryland, Eric W.; Vanherzeele, H.; Woodall, M. A.; Soileau, M. J.; Smirl, Arthur L.; Guha, Shekhar; Boggess, Thomas F.) 24(4)613-623(J/A1985)
Wave mixing in photorefractive bismuth silicon oxide crystals and its applications (Huignard, J. P.; Rajbenbach, H.; Refregier, Ph.; Solymar, L.) 24(4)586-592(J/A1985)

Oceanography
Solid state spectral transmissometer and radiometer (Carder, Kendall L.; Steward, R. G.; Payne, P. R.) 24(5)863-868(S/O1985)

Optical circuits
Battelle's proposed cooperative program to develop guided wave optoelectronic manufacturing technology (Holman, Robert L.; Skinner, Doyle P.) 24(2)251-255(M/A1985)
Guided wave optical structures utilizing silicon (Boyd, J. T.; Wu, R. W.; Zelmon, D. E.; Naumann, A.; Timlin, H. A.; Jackson, Howard E.) 24(2)230-234(M/A1985)
Integrated optical circuit engineering (Sriram, S.) (Ed) 24(2)213(M/A1985)
Ion implanted optical waveguides in gallium arsenide (Mentzer, M. A.; Hunsperger, R. G.; Sriram, S.; Bartko, J.; Wlodawski, M. S.; Zavada, J. M.; Jenkinson, H. A.) 24(2)225-229(M/A1985)
Long wavelength titanium-doped lithium niobate directional coupler optical switches and switch arrays (McCaughan, L.) 24(2)241-243(M/A1985)
Nonlinear optical circuit elements as logic gates for optical computers: the first digital optical circuits (Smith, S. D.; Janossy, I.; MacKenzie, H. A.; Mathew, J. G. H.; Reid, J. J. E.; Taghizadeh, M. R.; Tooley, F. A. P.; Walker, A. C.) 24(4)569-574(J/A1985)
Optoelectronic switch matrices: recent developments (MacDonald, R. I.; Lam, D. K. W.) 24(2)220-224(M/A1985)
Photonics for integrated circuits and communications (Merz, James L.; Yuan, Y. R.; Vawter, G. A.) 24(2)214-219(M/A1985)

Optical communications
Beam pointing error as a significant design parameter for satellite-borne free-space optical communication systems (Barry, J. D.; Mecherle, G. S.) 24(6)1049-1054(N/D1985)
Fiber Optic Communications. By Joseph C. Palais. (Reviewed by Forrest, S. R.) (BR) 24(1)SR014-SR016(J/F1985)
Holographic filters in dichromated gelatin position tuned over near infrared region (Duncan, S. S.; McQuoid, J. A.; McCartney, D. J.) 24(5)781-785(S/O1985)
Long wavelength titanium-doped lithium niobate directional coupler optical switches and switch arrays (McCaughan, L.) 24(2)241-243(M/A1985)
Optoelectronic Switching Systems in Telecommunications & Computers. By Herbert A. Elion and V. N. Morozov. (Reviewed by Sriram, S.) (BR) 24(1)SR014(J/F1985)
Principles of a switching extensive fiber optic network (Meyrueis, Patrick; Pfeiffer, Pierre) 24(5)869-871(S/O1985)

Optical computers
Nonlinear optical circuit elements as logic gates for optical computers: the first digital optical circuits (Smith, S. D.; Janossy, I.; MacKenzie, H. A.; Mathew, J. G. H.; Reid, J. J. E.; Taghizadeh, M. R.; Tooley, F. A. P.; Walker, A. C.) 24(4)569-574(J/A1985)

Optical computing
Coherent optical pattern recognition: a review (Casasent, David P.) 24(1)026-032(J/F1985)
Convolver-based optical systolic processing architectures (Cartwright, Steven; Gustafson, Steven C.) 24(1)059-064(J/F1985)
Fault tolerance and self-healing in optical systolic array processors (Caulfield, H. John; Putnam, R. S.) 24(1)065-067(J/F1985)
Integrated optical architectures for matrix multiplication (Verber, Carl M.) 24(1)019-025(J/F1985)
Materials requirements for optical processing and computing devices (Tanguay, Armand R., Jr.) 24(1)002-018(J/F1985)
Optical analog solutions of partial differential and integral equations (Lee, Sing H.) 24(1)041-047(J/F1985)
Optical computer switching network (Clymer, B.; Collins, Stuart A., Jr.) 24(1)074-081(J/F1985)
Optical computing (Neff, John A.) (Ed) 24(1)001(J/F1985)
Optical computing by Monte Carlo methods (Morris, G. Michael 24(1)086-090(J/F1985)
Optical digital truth table look-up processing (Gaylord, Thomas K.; Mirsalehi, M. M.; Guest, C. C.) 24(1)048-058(J/F1985)
Optical information processing components (Tanguay, Armand R., Jr.; Warde, Cardinal) (Ed) 24(1)091(J/F1985)
Optical three-dimensional sensing for machine vision (Strand, Timothy C.) 24(1)033-040(J/F1985)
Two-dimensional Radon-Fourier transformer (Ticknor, Anthony J.; Easton, Roger L.; Barrett, Harrison H.) 24(1)082-085(J/F1985)

Optical design
Aberrations of the Mangin mirror (Gelles, Rubin) 24(2)322-325(M/A1985)
Aplanatic four spherical mirror system (Chung, Hai Bin; Lee, Sang Soo) 24(2)317-321(M/A1985)
Design and performance of ranging telescopes: monolithic vs synthetic aperture (Harvey, James E.; MacFarlane, Malcolm J.; Forgham, James L.) 24(1)183-188(J/F1985)
Electronic image alignment: implementation and applications to imaging system design (Mord, Allan J.; Endsley, Neil H.; Ramberg, Eric; Reitsema, Harold J.) 24(3)507-515(M/J1985)
Fiber optic angioscopes (D'Amelio, Frank D.; DeLisi, Steven T.; Rega, Anthony) 24(4)672-675(J/A1985)
Mangin mirror performance for optical processing with feedback: experimental evaluation of (Fainman, Y.; Lee, Sing H.) 24(3)535-540(M/J1985)
Optical design of thermal imaging systems utilizing gradient-index optical materials (Howard, James W.; Ryan-Howard, Danette P.) 24(2)263-266(M/A1985)
Optical system equivalent to a variable power saddle mirror (Murty, M. V. R. K.) 24(3)497-498(M/J1985)
Programmable calculators: their use in lens design and analysis (Beckmann, Leo H. J. F.) 24(4)713-716(J/A1985)
Three mirror wide field optical system: manufacture of a (Egdall, Ira M.) 24(2)285-289(M/A1985)

Optical Engineering Journal
Annual index to Vol. 24 [1985 Optical Engineering]. 24(6)1108-1134(N/D1985)
Frequency doubling and other changes (Gaskill, Jack D.) (Ed) 24(6)SR146(N/D1985)
Funny thing happened on the way to... (Gaskill, Jack D.) (Ed) 24(4)SR092(J/A1985)
New editor for Optical Engineering (Caulfield, H. John) (Ed) 24(1)SR006(J/F1985)
Of past and future: my last editorial (Caulfield, H. John) (Ed) 24(3)SR060(M/J1985)
Perfectionist reviewer (Caulfield, H. John) (Ed) 24(2)SR034(M/A1985)
Review process (Gaskill, Jack D.) (Ed) 24(5)SR116(S/O1985)

Optical fabrication
Aspherics: precision manufacturing by vacuum evaporation (Angenieux, Jacques; Masson, Andre; Rouchouse, Yvon) 24(3)499-501(M/J1985)
Elimination of clover in machining of off-centered conic mirrors (Yoder, R. C.) 24(3)485-496(M/J1985)
Fabrication of optical components for the ultraviolet spectrometer and polarimeter on the Solar Maximum Mission (Spencer, R. S.; Bergen, G. J.; Fleetwood, Charles M.; Herzig, H.; Miner, L.; Rice, S. H.; Smigocki, E.; Woodgate, B. E.; Zaniewski, J. J.) 24(3)548-554(M/J1985)
Holographic mirrors (Magarinos, Jose R.; Coleman, Daniel J.) 24(5)769-780(S/O1985)
Real time control of spindle runout (Bifano, T. G.; Dow, T. A.) 24(5)888-892(S/O1985)
Three mirror wide field optical system: manufacture of a (Egdall, Ira M.) 24(2)285-289(M/A1985)

Optical materials
Infrared fibers: an overview of prospective materials, fabrication methods, and applications (Bendow, Bernard; Rast, Howard; El-Bayoumi, Osama H.) 24(6)1072-1080(N/D1985)
Intensity dependent index of refraction in organic materials (Carter, G. M.; Chen, Y. J.; Tripathy, S. K.) 24(4)609-612(J/A1985)
Intrinsic instabilities of heavy metal fluoride glasses (Bruce, A. J.; Moynihan, C. T.; Loehr, S. R.; Opalka, S. M.; Mossadegh, R.; Perazzo, N. L.; Bansal, N. P.; Doremus, R. H.; Drexhage, Martin G.) 24(3)522-526(M/J1985)
Magnesium doped lithium niobate for higher optical power applications (Bryan, D. A.; Rice, R. R.; Gerson, Robert; Tomaschke, H. E.; Sweeney, K. L.; Halliburton, L. E.) 24(1)138-143(J/F1985)
Materials and devices for optical information processing (Warde, Cardinal; Efron, Uzi) (Ed) 24(1)092(J/F1985)
Materials for acoustooptic devices, selection of (Chang, I. C.) 24(1)132-137(J/F1985)
Materials requirements for optical processing and computing devices (Tanguay, Armand R., Jr.) 24(1)002-018(J/F1985)
Nonlinear optical materials, devices, and applications (Dagenais, Mario; Seymour, Robert J.) (Ed) 24(4)555(J/A1985)
Optical design of thermal imaging systems utilizing gradient-index optical materials (Howard, James W.; Ryan-Howard, Danette P.) 24(2)263-266(M/A1985)
Single crystal fibers by the laser heated pedestal growth method (Feigelson, R. S.; Kway, W. L.; Route, R. K.) 24(6)1102-1107(N/D1985)

Optical processing
Convolver-based optical systolic processing architectures (Cartwright, Steven; Gustafson, Steven C.) 24(1)059-064(J/F1985)
Dynamic optical cross correlator using a liquid crystal light valve and a bismuth silicon oxide crystal in the Fourier plane (Loiseaux, B.; Illiaquer, G.; Huignard, J. P.) 24(1)144-149(J/F1985)
Electron beam addressed microchannel spatial light modulator (Schwartz, A.; Wang, X-Y.; Warde, Cardinal) 24(1)119-123(J/F1985)
Fault tolerance and self-healing in optical systolic array processors (Caulfield, H. John; Putnam, R. S.) 24(1)065-067(J/F1985)
Holographic optical processing for submicrometer defect detection (Fusek, Richard L.; Lin, L. H.; Harding, K.; Gustafson, Steven C.) 24(5)731-734(S/O1985)
Infrared all-optical information processing in semiconductors (Garmire, Elsa) 24(4)575-578(J/A1985)
Liquid-crystal-based visible-to-infrared dynamic image converter (Efron, Uzi; Wu, S. T.; Grinberg, Jan; Hess, L. D.) 24(1)111-118(J/F1985)
Magnesium doped lithium niobate for higher optical power applications (Bryan, D. A.; Rice, R. R.; Gerson, Robert; Tomaschke, H. E.; Sweeney, K. L.; Halliburton, L. E.) 24(1)138-143(J/F1985)
Mangin mirror performance for optical processing with feedback: experimental evaluation of (Fainman, Y.; Lee, Sing H.) 24(3)535-540(M/J1985)
Materials and devices for optical information processing (Warde, Cardinal; Efron, Uzi) (Ed) 24(1)092(J/F1985)
Materials for acoustooptic devices, selection of (Chang, I. C.) 24(1)132-137(J/F1985)
Materials requirements for optical processing and computing devices (Tanguay, Armand R., Jr.) 24(1)002-018(J/F1985)
Microcomputer based digital image processing system developed to count and size laser-generated small particle images (Ahlers, K. D.; Alexander, D. R.) 24(6)1060-1065(N/D1985)
Micromechanical light modulators on silicon (Brooks, Robert E.) 24(1)101-106(J/F1985)
Nonlinear optical properties of GaAs/GaAlAs multiple quantum well material: phenomena and applications (Chemla, D. S.; Miller, D. A. B.; Smith, P. W.) 24(4)556-564(J/A1985)
Optical bistability for optical signal processing and computing (Peyghambarian, N.; Gibbs, H. M.) 24(1)068-073(J/F1985)
Optical information processing components (Tanguay, Armand R., Jr.; Warde, Cardinal) (Ed) 24(1)091(J/F1985)
Optically addressed membrane spatial light modulator (Pape, Dennis R.) 24(1)107-110(J/F1985)
Physical characterization of the photorefractive incoherent to coherent optical converter (Marrakchi, A.; Tanguay, Armand R., Jr.; Yu, J.; Psaltis, Demetri) 24(1)124-131(J/F1985)
Scophony spatial light modulator (Johnson, Richard V.; Guerin, Jean-Michel; Swanberg, Mel E.) 24(1)093-100(J/F1985)

Optical properties
Thermal emissivity of diathermanous materials (Munis, R. H.; Marshall, S. J.) 24(5)872-878(S/O1985)

Optical Sciences Center
Optics at the Optical Sciences Center, Part II (Seeley, Kathleen S.; Gaskill, Jack D.) (PC) 24(1)SR008-SR012(J/F1985)

Optical shop
Finish characteristics of machined optical surfaces: survey of the (Church, Eugene L.; Takacs, P. Z.) 24(3)396-403(M/J1985)

Optical systems
Aplanatic four spherical mirror system (Chung, Hai Bin; Lee, Sang Soo) 24(2)317-321(M/A1985)
High speed combustion photography with endoscopes in actual diesel engines: a new approach (Werlberger, Peter) 24(6)1045-1048(N/D1985)
Nonreversible mirrors equivalent to saddle mirrors (Murty, M. V. R. K.) 24(2)329-331(M/A1985)
Offner 1:1 system: some further uses (Murty, M. V. R. K.) 24(2)326-328(M/A1985)
Optical scanner for linear arrays (Finkel, Mitchell; Kalshoven, James, Jr.; Leone, Peter; Strange, Maxwell) 24(2)313-316(M/A1985)
Optical system equivalent to a variable power saddle mirror (Murty, M. V. R. K.) 24(3)497-498(M/J1985)
Three mirror wide field optical system: manufacture of a (Egdall, Ira M.) 24(2)285-289(M/A1985)
Three-dimensional object representation in imaging systems (Laub, G. A.; Lenz, G.; Reinhardt, Erich R.) 24(5)901-905(S/O1985)

Optical testing
Elimination of clover in machining of off-centered conic mirrors (Yoder, R. C.) 24(3)485-496(M/J1985)
Mangin mirror performance for optical processing with feedback: experimental evaluation of (Fainman, Y.; Lee, Sing H.) 24(3)535-540(M/J1985)
Moire deflectometry: a ray deflection approach to optical testing (Kafri, O.; Glatt, I.) 24(6)944-960(N/D1985)
Three mirror wide field optical system: manufacture of a (Egdall, Ira M.) 24(2)285-289(M/A1985)

Optics
Categorized Bibliography of Optical Publications. By Douglas Goodman. (Reviewed by Gaynor, Winn) (BR) 24(3)SR068(M/J1985)
Infrared optics (Armstrong, Scott A.; Wallace, Nelson W.) (Ed) 24(2)256(M/A1985)
Optics and Lasers Including Fibers and Integrated Optics. By M. Young. (Reviewed by Rose, Douglas A.) (BR) 24(4)SR099(J/F1985)

Optics at the Beijing Institute of Technology (China) (Peiran, Yan; Zhenyi, Li; Dazun, Zhao) (FC) 24(2)SR037(M/A1985)
Optics at the Optical Sciences Center, Part II (Seeley, Kathleen S.; Gaskill, Jack D.) (FC) 24(1)SR008-SR012(J/F1985)

Optics at (FC)
Optics at the Beijing Institute of Technology (China) (Peiran, Yan; Zhenyi, Li; Dazun, Zhao) (FC) 24(2)SR037(M/A1985)
Optics at the Optical Sciences Center, Part II (Seeley, Kathleen S.; Gaskill, Jack D.) (FC) 24(1)SR008-SR012(J/F1985)

Optoelectronics
Battelle's proposed cooperative program to develop guided wave optoelectronic manufacturing technology (Holman, Robert L.; Skinner, Doyle P.) 24(2)251-255(M/A1985)
Nonlinear optical properties of GaAs/GaAlAs multiple quantum well material: phenomena and applications (Chemla, D. S.; Miller, D. A. B.; Smith, P. W.) 24(4)556-564(J/A1985)
Optoelectronic switch matrices: recent developments (MacDonald, R. I.; Lam, D. K. W.) 24(2)220-224(M/A1985)
Optoelectronic Switching Systems in Telecommunications & Computers. By Herbert A. Elion and V. N. Morozov. (Reviewed by Sriram, S.) (BR) 24(1)SR014(J/F1985)

Particles
Automated analysis of particle holograms (Caulfield, H. John) 24(3)462-463(M/J1985)
Automated reduction of instantaneous flow field images (Reynolds, G. A.; Short, M.; Whiffen, M. C.) 24(3)475-479(M/J1985)
Detection of short-lived particles using holography (Haridas, P.; Hafen, E.; Pless, I.; Harton, J.; Dixit, S.; Goloskie, D.; Benton, Stephen A.) 24(5)741-745(S/O1985)
Microcomputer based digital image processing system developed to count and size laser-generated small particle images (Ahlers, K. D.; Alexander, D. R.) 24(6)1060-1065(N/D1985)
Particle field holography data reduction by Fourier transform analysis (Hess, Cecil F.; Trolinger, James D.) 24(3)470-474(M/J1985)

Patents
Patent and Trademark Tactics and Practice. By David A. Burge. (Reviewed by Maslow, James E.) (BR) 24(1)SR012-SR013(J/F1985)

Pattern recognition
Automatic interpretation of electroencephalograms by means of an expert system (Jansen, Ben H.) 24(6)1009-1010(N/D1985)
Coherent optical pattern recognition: a review (Casasent, David P.) 24(1)026-032(J/F1985)
Computer generated holograms in pattern recognition: a review (Casasent, David P.) 24(5)724-730(S/O1985)
Generalized singular value decomposition and discriminant analysis (Gruninger, John) 24(6)991-995(N/D1985)
Identification of unique objects in high resolution aerial images (Trivedi, Mohan M.; Harlow, Charles A.) 24(3)502-506(M/J1985)
Median filter as image preprocessor for machine recognition (Lai, D. C.; Verfaille, K.; Potenza, J.) 24(6)1030-1037(N/D1985)
Microprocessor controlled chemical detection and alarm system based on ion mobility spectrometry (Roehl, Joseph E.) 24(6)985-990(N/D1985)
Optical digital truth table look-up processing (Gaylord, Thomas K.; Mirsalehi, M. M.; Guest, C. C.) 24(1)048-058(J/F1985)
Spectral correlator technologies (Frankel, Donald S.; Camac, M.; Caulfield, H. John; Gozewski, C.; Kolb, C. E.) 24(6)996-1003(N/D1985)
Spectral pattern recognition (Frankel, Donald S.; Sindoni, O. I.) (Ed) 24(6)981(N/D1985)
Use of simulation data sets for assessing interlaboratory pattern recognition accuracy (Currie, L. A.) 24(6)1004-1008(N/D1985)

Phase conjugation
Liquid crystals: nonlinear optical properties and processes (Khoo, I. C.; Shen, Y. R.) 24(4)579-585(J/A1985)
Magnesium doped lithium niobate for higher optical power applications (Bryan, D. A.; Rice, R. R.; Gerson, Robert; Tomaschke, H. E.; Sweeney, K. L.; Halliburton, L. E.) 24(1)138-143(J/F1985)
Physical characterization of the photorefractive incoherent to coherent optical converter (Marrakchi, A.; Tanguay, Armand R., Jr.; Yu, J.; Psaltis, Demetri) 24(1)124-131(J/F1985)
Wave mixing in photorefractive bismuth silicon oxide crystals and its applications (Huignard, J. P.; Rajbenbach, H.; Refregier, Ph.; Solymar, L.) 24(4)586-592(J/A1985)

Phase measurement
Differential laser heterodyne micrometrology (Wickramasinghe, H. K.) 24(6)926-929(N/D1985)
Holographic contouring using electronic phase measurement (Thalmann, R.; Dandliker, R.) 24(6)930-935(N/D1985)

Photoconduction
Multianode microchannel array detector systems: performance characteristics (Timothy, J. G.) 24(6)1066-1071(N/D1985)

Photoconductors
Optoelectronic switch matrices: recent developments (MacDonald, R. I.; Lam, D. K. W.) 24(2)220-224(M/A1985)
Photoconductive detectors employing an optically induced nonlinear resistance (Dean, A. B.; Elliott, C. T.; White, A. M.) 24(4)668-671(J/A1985)

Photogrammetry
Image motion compensation through augmented collinearity equations (Ghosh, Sanjib K.) 24(6)1014-1017(N/D1985)

Photography
Applied infrared presensitization photography (Geary, Joseph M. Vunck, D.; Deuto, B.; Sessions, R.; Duneman, Dennis; Moeller, Charles E.; Wick, R.) 24(2)332-337(M/A1985)
High speed combustion photography with endoscopes in actual diesel engines: a new approach (Werlberger, Peter) 24(6)1045-1048(N/D1985)
Infrared presensitization photography and the characteristic curve (Geary, Joseph M.) 24(4)704-706(J/A1985)
Infrared presensitization photography and spectral sensitivity (Geary, Joseph M.) 24(5)913-917(S/O1985)
Photodeposition recording and display technology (Peled, A.) 24(4)717-718(J/A1985)
Photographic Science. By Earl N. Mitchell. (Reviewed by Granger, E. M.) (BR) 24(2)SR042(M/A1985)

Photomasks
Analysis of linewidth measurement techniques for the purpose of automation (Kirk, C. P.; Moore, D. S.; Nelson, J. C. C.) 24(4)650-654(J/A1985)

Photon counting
Optical computing by Monte Carlo methods (Morris, G. Michael) 24(1)086-090(J/F1985)

Photopolymers
Hologram recording with a new photopolymer system (Ingwall, R. T.; Fielding, H. L.) 24(5)808-811(S/O1985)

Photorefraction
Dynamic optical cross correlator using a liquid crystal light valve and a bismuth silicon oxide crystal in the Fourier plane (Loiseaux, B.; Illiaquer, G.; Huignard, J. P.) 24(1)144-149(J/F1985)
Magnesium doped lithium niobate for higher optical power applications (Bryan, D. A.; Rice, R. R.; Gerson, Robert; Tomaschke, H. E.; Sweeney, K. L.; Halliburton, L. E.) 24(1)138-143(J/F1985)
Physical characterization of the photorefractive incoherent to coherent optical converter (Marrakchi, A.; Tanguay, Armand R., Jr.; Yu, J.; Psaltis, Demetri) 24(1)124-131(J/F1985)
Wave mixing in photorefractive bismuth silicon oxide crystals and its applications (Huignard, J. P.; Rajbenbach, H.; Refregier, Ph.; Solymar, L.) 24(4)586-592(J/A1985)

Photoresists
Holographic honeycomb microlens (Cowan, James J.) 24(5)796-802(S/O1985)

Photovoltaic systems
Solar cell technology: overview (Adler, David) (FC) 24(6)SR148-SR150(N/D1985)

Plasmas
Laser Interaction and Related Plasma Phenomena, Vol. 6. Edited by Heinrich Hora and George H. Miley. (Reviewed by Saito, Theodore T.) (BR) 24(1)SR014(J/F1985)
Velocities of gases and plasmas from real time holographic

interferograms (Deason, V. A.; Reynolds, L. D.; McIlwain, M. E.) 24(5)735-740(S/O1985)

Polarimeters
Fabrication of optical components for the ultraviolet spectrometer and polarimeter on the Solar Maximum Mission (Spencer, R. S.; Bergen, G. J.; Fleetwood, Charles M.; Herzig, H.; Miner, L.; Rice, S. H.; Smigocki, E.; Woodgate, B. E.; Zaniewski, J. J.) 24(3)548-554(M/J1985)

Polarizers
Multiple reflection polarizers using dielectric coated metallic mirrors (Thonn, Tracy F.; Azzam, R. M. A.) 24(1)202-206(J/F1985)

Pollution
Optical Remote Sensing of Air Pollution. Edited by P. Camagni and S. Sandroni. (Reviewed by Menyuk, Norman) (BR) 24(2)SR041-SR042(M/A1985)
Spectral correlator technologies (Frankel, Donald S.; Camac, M.; Caulfield, H. John; Gozewski, C.; Kolb, C. E.) 24(6)996-1003(N/D1985)

Processors
Convolver-based optical systolic processing architectures (Cartwright, Steven; Gustafson, Steven C.) 24(1)059-064(J/F1985)
Fault tolerance and self-healing in optical systolic array processors (Caulfield, H. John; Putnam, R. S.) 24(1)065-067(J/F1985)

Profiling
Finish characteristics of machined optical surfaces: survey of the (Church, Eugene L.; Takacs, P. Z.) 24(3)396-403(M/J1985)
Measuring roughness of optical surfaces: comparison of techniques for (Bennett, Jean M.) 24(3)380-387(M/J1985)
Mechanical and optical measurements of finish of precision machined optical surfaces: direct comparison of (Church, Eugene L.; Vorburger, Theodore V.; Wyant, James C.) 24(3)388-395(M/J1985)

Projection systems
Slope and deformation mapping by grating projection technique (Livnat, A.; Kafri, O.) 24(1)150-152(J/F1985)

Pulses
Application of pulsed reflection holography to material testing (vanRenesse, R. L.; Burgmeijer, J. W.) 24(6)1086-1092(N/D1985)
Pulse modulation of an excimer pumped dye laser (Efthimiopoulos, T.) 24(5)906-907(S/O1985)
Pulsed fiber holography: new technique for hologram interferometry (Bjelkhagen, Hans I.) 24(4)645-649(J/A1985)
Pulsed laser holography in studies of bone motions and deformations (Pryputniewicz, Ryszard J.) 24(5)832-839(S/O1985)
Pulsed lasers for holographic interferometry (Pitlak, R. T.; Page, R.) 24(4)639-644(J/A1985)

Pyrometers
Multiwavelength pyrometry: an improved method (Hunter, Gordon B.; Allemand, Charly D.; Eagar, Thomas W.) 24(6)1081-1085(N/D1985)

Quantum optics
Coherence and Quantum Optics V. Edited by Leonard Mandel and Emil Wolf. (Reviewed by O'Neill, Edward L.) (BR) 24(4)SR099-SR100(J/F1985)

Quantum wells
Evidence that room temperature optical bistability is excitonic in both bulk & multiple quantum well gallium arsenide (Ovadia, S.; Gibbs, H. M.; Jewell, J. L.; Sarid, D.; Peyghambarian, N.) 24(4)565-568(J/A1985)
Nonlinear optical properties of GaAs/GaAlAs multiple quantum well material: phenomena and applications (Chemla, D. S.; Miller, D. A. B.; Smith, P. W.) 24(4)556-564(J/A1985)

Radiation
Stratospheric Aerosol and Gas Experiment II instrument: a functional description (Mauldin, L. E., III; Zaun, N. H.; McCormick, M. Patrick, Jr.; Guy, J. H.; Vaughn, W. R.) 24(2)307-312(M/A1985)

Radiometers
Solid state spectral transmissometer and radiometer (Carder, Kendall L.; Steward, R. G.; Payne, P. R.) 24(5)863-868(S/O1985)

Radiometry
Determination of the incident angle of solar rays on a flat surface (Zanker, Adam) (PC) 24(4)SR094-SR096(J/A1985)
Effective radiant sterance computation (Johnson, R. Barry) 24(4)721(J/A1985)
Ten micrometer infrared light emitting diodes for radiometric sources (Linden, K. J.; Palmacci, S. T.) 24(4)719-720(J/A1985)

Radon transforms
Two-dimensional Radon-Fourier transformer (Ticknor, Anthony J.; Easton, Roger L.; Barrett, Harrison H.) 24(1)082-085(J/F1985)

Ranging
Design and performance of ranging telescopes: monolithic vs synthetic aperture (Harvey, James E.; MacFarlane, Malcolm J.; Forgham, James L.) 24(1)183-188(J/F1985)
Optical three-dimensional sensing for machine vision (Strand, Timothy C.) 24(1)033-040(J/F1985)

Reflectance
Solid state spectral transmissometer and radiometer (Carder, Kendall L.; Steward, R. G.; Payne, P. R.) 24(5)863-868(S/O1985)

Refractive index
Intensity dependent index of refraction in organic materials (Carter, G. M.; Chen, Y. J.; Tripathy, S. K.) 24(4)609-612(J/A1985)
Nondestructive refractive index characterization of optical fibers using phase contrast scanning optical microscope (Ball, S.) 24(3)518-521(M/J1985)
Quantitative shadow method for measuring a one-dimensional refractive index distribution (Lewis, Robert W.) 24(6)1098-1101(N/D1985)
Spectral signatures of chemical agents and simulants (Hoffland, Lynn D.; Piffath, Ronald J.; Bouck, James B.) 24(6)982-984(N/D1985)
Thermal emissivity of diathermanous materials (Munis, R. H.; Marshall, S. J.) 24(5)872-878(S/O1985)
Two photon absorption, nonlinear refraction, and optical limiting in semiconductors (VanStryland, Eric W.; Vanherzeele, H.; Woodall, M. A.; Soileau, M. J.; Smirl, Arthur L.; Guha, Shekhar; Boggess, Thomas F.) 24(4)613-623(J/A1985)

Remote sensing
Electronic image alignment: implementation and applications to imaging system design (Mord, Allan J.; Endsley, Neil H.; Ramberg, Eric; Reitsema, Harold J.) 24(3)507-515(M/J1985)
Identification of unique objects in high resolution aerial images (Trivedi, Mohan M.; Harlow, Charles A.) 24(3)502-506(M/J1985)
Optical Remote Sensing of Air Pollution. Edited by P. Camagni and S. Sandroni. (Reviewed by Menyuk, Norman) (BR) 24(2)SR041-SR042(M/A1985)
Remote deformation field measurement through different media using fiber optics (Gilbert, J. A.; Dudderar, T. D.; Nose, A.) 24(4)628-631(J/A1985)
Remote Sounding of Atmospheres (Cambridge Planetary Science Series, Vol. 5). By J. T. Houghton, F. W. Taylor, and C. D. Rodgers. (Reviewed by Orton, Glen S.) (BR) 24(3)SR066-SR067(M/J1985)
Spectrometric Techniques, Vol. III. Edited by George A. Vanasse. (Reviewed by Chance, K.) (BR) 24(2)SR038-SR041(M/A1985)

Resolution
Empirical television sensor performance model (Schmieder, David E.; Wolfe, Burton) 24(5)882-887(S/O1985)

Satellites
Achromatic holographic stereogram of Landsat multispectral scanner data (Benton, Stephen A.; Duston-Roberge, D. A.; Simard, R.) 24(2)338-340(M/A1985)
Beam pointing error as a significant design parameter for satellite-borne free-space optical communication systems (Barry, J. D.; Mecherle, G. S.) 24(6)1049-1054(N/D1985)
Impact of satellite temperature sounding and wind data on numerical weather prediction (Atlas, R.; Kalnay, E.; Halem, M.) 24(2)341-346(M/A1985)
Spatial sharpening of Thematic Mapper data using a multiband approach (Tom, Victor T.; Carlotto, Mark J.; Scholten, Daniel K.) 24(6)1026-1029(N/D1985)
Stratospheric Aerosol and Gas Experiment II instrument: a functional description (Mauldin, L. E., III; Zaun, N. H.;

McCormick, M. Patrick, Jr.; Guy, J. H.; Vaughn, W. R.) 24(2)307-312(M/A1985)

Scanners
Achromatic holographic stereogram of Landsat multispectral scanner data (Benton, Stephen A.; Duston-Roberge, D. A.; Simard, R.) 24(2)338-340(M/A1985)
Nondestructive refractive index characterization of optical fibers using phase contrast scanning optical microscope (Ball, S.) 24(3)518-521(M/J1985)
Nonlinear guided wave applications (Seaton, C. T.; Mai, Xu; Stegeman, G. I.; Winful, H. G.) 24(4)593-599(J/A1985)
Optical scanner for linear arrays (Finkel, Mitchell; Kalshoven, James, Jr.; Leone, Peter; Strange, Maxwell) 24(2)313-316(M/A1985)
Resonant scanner linearization techniques (Tweed, David G.) 24(6)1018-1022(N/D1985)
Scophony spatial light modulator (Johnson, Richard V.; Guerin, Jean-Michel; Swanberg, Mel E.) 24(1)093-100(J/F1985)
Telecentric scanner for three-dimensional sensing (Hausler, G.; Maul, M.) 24(6)978-980(N/D1985)
Triangulation with expanded range of depth (Bickel, G.; Hausler, G.; Maul, M.) 24(6)975-977(N/D1985)

Scattering
Effects of aerosols on imaging through the atmosphere: review of spatial frequency and wavelength dependent effects (Kopeika, N. S.) 24(4)707-712(J/A1985)
Limitations of light propagation in infrared optical fibers: theoretical overview (Klocek, Paul; Sparks, Marshall) 24(6)1093-1097(N/D1985)
Measurement of low angle scatter (Stover, John C.; Cady, Fredrick M.; Sklar, Edward) 24(3)404-407(M/J1985)
Optical roughness measuring instrument for fine machined surfaces (Brodmann, Rainer; Gerstorfer, Oskar; Thurn, Gerd) 24(3)408-413(M/J1985)
Solid state spectral transmissometer and radiometer (Carder, Kendall L.; Steward, R. G.; Payne, P. R.) 24(5)863-868(S/O1985)
Standardized total integrated scatter measurements of optical surfaces (Detrio, John A.; Miner, Susan M.) 24(3)419-422(M/J1985)

Scattering, Brillouin
Rayleigh and Brillouin scattering in heavy metal fluoride glasses: intrinsic Rayleigh scattering (Schroeder, John; Fox-Bilmont, Marsha; Pazol, Brian G.; Tsoukala, Veneta; Drexhage, Martin G.; El-Bayoumi, Osama H.) 24(4)697-703(J/A1985)

Scattering, coherent antiStokes Raman
Imaging biological compounds using the coherent antiStokes Raman scattering microscope (Duncan, M. D.; Reintjes, J.; Manuccia, T. J.) 24(2)352-355(M/A1985)

Scattering, Rayleigh
Rayleigh and Brillouin scattering in heavy metal fluoride glasses: intrinsic Rayleigh scattering (Schroeder, John; Fox-Bilmont, Marsha; Pazol, Brian G.; Tsoukala, Veneta; Drexhage, Martin G.; El-Bayoumi, Osama H.) 24(4)697-703(J/A1985)

Scattering, stimulated Raman
Raman and four photon mixing amplification in single mode fibers (Pocholle, J. P.; Raffy, J.; Papuchon, M.; Desurvire, E.) 24(4)600-608(J/A1985)

Semiconductors
Infrared all-optical information processing in semiconductors (Garmire, Elsa) 24(4)575-578(J/A1985)
Nonlinear optical properties of GaAs/GaAlAs multiple quantum well material: phenomena and applications (Chemla, D. S.; Miller, D. A. B.; Smith, P. W.) 24(4)556-564(J/A1985)
Two photon absorption, nonlinear refraction, and optical limiting in semiconductors (VanStryland, Eric W.; Vanherzeele, H.; Woodall, M. A.; Soileau, M. J.; Smirl, Arthur L.; Guha, Shekhar; Boggess, Thomas F.) 24(4)613-623(J/A1985)

Sensors
Empirical television sensor performance model (Schmieder, David E.; Wolfe, Burton) 24(5)882-887(S/O1985)
Fiber displacement sensors for metrology and control (Johnson, Mark) 24(6)961-965(N/D1985)
Fiber optic sensors: an overview (Davis, Charles M.) 24(2)347-351(M/A1985)
Optical Fibre Sensing and Signal Processing. By B. Culshaw. (Reviewed by Soref, Richard A.) (BR) 24(1)SR012(J/F1985)

Shadow method
Quantitative shadow method for measuring a one-dimensional refractive index distribution (Lewis, Robert W.) 24(6)1098-1101(N/D1985)

Signal processing
Automatic interpretation of electroencephalograms by means of an expert system (Jansen, Ben H.) 24(6)1009-1010(N/D1985)
Influence of nonuniformity on infrared focal plane array performance (Milton, A. F.; Barone, F. R.; Kruer, M. R.) 24(5)855-862(S/O1985)
Integrated lenses on silicon nitride waveguides (Gidon, P.; Valette, S.; Mottier, P.) 24(2)235-240(M/A1985)
Intensity dependent index of refraction in organic materials (Carter, G. M.; Chen, Y. J.; Tripathy, S. K.) 24(4)609-612(J/A1985)
Ion implanted optical waveguides in gallium arsenide (Mentzer, M. A.; Hunsperger, R. G.; Sriram, S.; Bartko, J.; Wlodawski, M. S.; Zavada, J. M.; Jenkinson, H. A.) 24(2)225-229(M/A1985)
Microprocessor controlled chemical detection and alarm system based on ion mobility spectrometry (Roehl, Joseph E.) 24(6)985-990(N/D1985)
Optical bistability for optical signal processing and computing (Peyghambarian, N.; Gibbs, H. M.) 24(1)068-073(J/F1985)
Optical Fibre Sensing and Signal Processing. By B. Culshaw. (Reviewed by Soref, Richard A.) (BR) 24(1)SR012(J/F1985)

Signal to noise ratio
Empirical television sensor performance model (Schmieder, David E.; Wolfe, Burton) 24(5)882-887(S/O1985)

Silicon
Guided wave optical structures utilizing silicon (Boyd, J. T.; Wu, R. W.; Zelmon, D. E.; Naumaan, A.; Timlin, H. A.; Jackson, Howard E.) 24(2)230-234(M/A1985)
Micromechanical light modulators on silicon (Brooks, Robert E.) 24(1)101-106(J/F1985)
Optically addressed membrane spatial light modulator (Pape, Dennis R.) 24(1)107-110(J/F1985)

Solar energy
Holographic honeycomb microlens (Cowan, James J.) 24(5)796-802(S/O1985)
Low cost high performance antireflective coatings for solar cells (Nakano, H.; Morita, H.; Washida, H.; Kato, T.; Hayashi, S.; Onoe, A.) 24(1)207-212(J/F1985)
Solar cell technology: overview (Adler, David) (PC) 24(6)SR148-SR150(N/D1985)

Sources
Interference sources in infrared systems operating in closed spaces (Georgopoulos, Chris J.) (PC) 24(3)SR062-SR066(M/J1985)

Space optics
Fabrication of optical components for the ultraviolet spectrometer and polarimeter on the Solar Maximum Mission (Spencer, R. S.; Bergen, G. J.; Fleetwood, Charles M.; Herzig, H.; Miner, L.; Rice, S. H.; Smigocki, E.; Woodgate, B. E.; Zaniewski, J. J.) 24(3)548-554(M/J1985)
Multianode microchannel array detector systems: performance characteristics (Timothy, J. G.) 24(6)1066-1071(N/D1985)
Spaceborne processing of multispectral image data: evaluation of experimental system for (Meredith, Barry D.; Murray, Nicholas D.; LaBaugh, Robert J.; Aanstoos, James V.) 24(1)189-196(J/F1985)
Stratospheric Aerosol and Gas Experiment II instrument: a functional description (Mauldin, L. E., III; Zaun, N. H.; McCormick, M. Patrick, Jr.; Guy, J. H.; Vaughn, W. R.) 24(2)307-312(M/A1985)

Spatial filters
Spectral correlator technologies (Frankel, Donald S.; Camac, M.; Caulfield, H. John; Gozewski, C.; Kolb, C. E.) 24(6)996-1003(N/D1985)

Spatial light modulators
Dynamic optical cross correlator using a liquid crystal light valve and a bismuth silicon oxide crystal in the Foucier plane (Loiseaux, B.; Illiaquer, G.; Huignard, J. P.) 24(1)144-149(J/F1985)
Electron beam addressed microchannel spatial light modulator (Schwartz, A.; Wang, X-Y.; Warde, Cardinal) 24(1)119-123(J/F1985)
Materials requirements for optical processing and computing

devices (Tanguay, Armand R., Jr.) 24(1)002-018(J/F1985)
Micromechanical light modulators on silicon (Brooks, Robert E.) 24(1)101-106(J/F1985)
Optical bistability for optical signal processing and computing (Peyghambarian, N.; Gibbs, H. M.) 24(1)068-073(J/F1985)
Optical computer switching network (Clymer, B.; Collins, Stuart A., Jr.) 24(1)074-081(J/F1985)
Optically addressed membrane spatial light modulator (Pape, Dennis R.) 24(1)107-110(J/F1985)
Physical characterization of the photorefractive incoherent to coherent optical converter (Marrakchi, A.; Tanguay, Armand R., Jr.; Yu, J.; Psaltis, Demetri) 24(1)124-131(J/F1985)
Scophony spatial light modulator (Johnson, Richard V.; Guerin, Jean-Michel; Swanberg, Mel E.) 24(1)093-100(J/F1985)

Speckle phenomena
Mapping of in-plane vibration modes by electronic speckle pattern interferometry (Lokberg, Ole J.) 24(2)356-359(M/A1985)
Random (speckle) patterns for displacement and strain measurement: some recent advances (Chiang, F. P.; Li, D. W.) 24(6)936-943(N/D1985)
Two-dimensional Radon-Fourier transformer (Ticknor, Anthony J.; Easton, Roger L.; Barrett, Harrison H.) 24(1)082-085(J/F1985)
White light method: new sensor for optical evaluation of rough surfaces (Ahlers, R.-J.) 24(3)423-427(M/J1985)

Spectrometers
Cryogenic servo-controlled infrared Fabry-Perot spectrometer (Smith, Howard A.; Fischer, Jacqueline; Waltman, William B.; Russell, Ray W.; Wollman, Eric R.; Albert, Elise; Stuart, Frank E.) 24(2)275-284(M/A1985)
Fabrication of optical components for the ultraviolet spectrometer and polarimeter on the Solar Maximum Mission (Spencer, R. S.; Bergen, G. J.; Fleetwood, Charles M.; Herzig, H.; Miner, L.; Rice, S. H.; Smigocki, E.; Woodgate, B. E.; Zaniewski, J. J.) 24(3)548-554(M/J1985)

Spectrometry
Linked gas chromatography/Fourier transform infrared spectrometry/Fourier transform mass spectrometry for mixture analysis (Laude, David A., Jr.; Johlman, Carolyn; Wilkins, Charles L.) 24(6)1011-1013(N/D1985)

Spectrometry, ion mobility
Microprocessor controlled chemical detection and alarm system based on ion mobility spectrometry (Roehl, Joseph E.) 24(6)985-990(N/D1985)

Spectroscopy
Detector size effects on peak-to-sidelobe ratio in bulk acousto-optic spectrum analyzer (Goutzoulis, A. P.; Kumar, B. V. K. Vijaya) 24(5)908-912(S/O1985)
Invasive spectroscopic technique--measuring temperature in highly pressurized combustion chambers (Klingenberg, Guenter 24(4)692-696(J/A1985)
Linked gas chromatography/Fourier transform infrared spectrometry/Fourier transform mass spectrometry for mixture analysis (Laude, David A., Jr.; Johlman, Carolyn; Wilkins, Charles L.) 24(6)1011-1013(N/D1985)
Microprocessor controlled chemical detection and alarm system based on ion mobility spectrometry (Roehl, Joseph E.) 24(6)985-990(N/D1985)
Spectral pattern recognition (Frankel, Donald S.; Sindoni, O. I.) (Ed) 24(6)981(N/D1985)
Spectral signatures of chemical agents and simulants (Hoffland, Lynn D.; Piffath, Ronald J.; Bouck, James B.) 24(6)982-984(N/D1985)
Use of simulation data sets for assessing interlaboratory pattern recognition accuracy (Currie, L. A.) 24(6)1004-1008(N/D1985)

Spectroscopy, infrared
Generalized singular value decomposition and discriminant analysis (Gruninger, John) 24(6)991-995(N/D1985)
Spectral signatures of chemical agents and simulants (Hoffland, Lynn D.; Piffath, Ronald J.; Bouck, James B.) 24(6)982-984(N/D1985)
Spectrometric Techniques, Vol. III. Edited by George A. Vanasse. (Reviewed by Chance, K.) (BR) 24(2)SR038-SR041(M/A1985)

Spectroscopy, laser
Laser Applications, Vol. 5. Edited by John F. Ready and Robert K. Erf. (Reviewed by Woodin, R. L.) (BR) 24(6)SR150-SR152(N/D1985)

Spectroscopy, molecular
Multiphoton Spectroscopy of Molecules. By S. H. Lin, Y. Fujimura, H. J. Neusser, and E. W. Schlag; edited by Paul P. Liao and Paul Kelley. (Reviewed by Djeu, N.) (BR) 24(2)SR038(M/A1985)
Spectral correlator technologies (Frankel, Donald S.; Camac, M.; Caulfield, H. John; Gozewski, C.; Kolb, C. E.) 24(6)996-1003(N/D1985)

Spectroscopy, Raman
Imaging biological compounds using the coherent antiStokes Raman scattering microscope (Duncan, M. D.; Reintjes, J.; Manuccia, T. J.) 24(2)352-355(M/A1985)
Spectral signatures of chemical agents and simulants (Hoffland, Lynn D.; Piffath, Ronald J.; Bouck, James B.) 24(6)982-984(N/D1985)

Standards
Specification and control of surface finish: empiricism vs dogmatism (Stout, K. J.; Obray, C.; Jungles, J.) 24(3)414-418(M/J1985)
Standardized total integrated scatter measurements of optical surfaces (Detrio, John A.; Miner, Susan M.) 24(3)419-422(M/J1985)
Use of simulation data sets for assessing interlaboratory pattern recognition accuracy (Currie, L. A.) 24(6)1004-1008(N/D1985)

Statistical optics
Statistical Optics. By Joseph W. Goodman. (Reviewed by Mandel, Leonard) (BR) 24(5)SR118(S/O1985)

Strain analysis
Heterodyne and quasi-heterodyne holographic interferometry (Dandliker, R.; Thalmann, R.) 24(5)824-831(S/O1985)
Heterodyne holography applications in studies of small components (Pryputniewicz, Ryszard J.) 24(5)849-854(S/O1985)
Moire interferometry for deformation and strain studies (Post, Daniel) 24(4)663-667(J/A1985)
Pulsed laser holography in studies of bone motions and deformations (Pryputniewicz, Ryszard J.) 24(5)832-839(S/O1985)
Random (speckle) patterns for displacement and strain measurement: some recent advances (Chiang, F. P.; Li, D. W.) 24(6)936-943(N/D1985)

Stratosphere
Stratospheric Aerosol and Gas Experiment II instrument: a functional description (Mauldin, L. E., III; Zaun, N. H.; McCormick, M. Patrick, Jr.; Guy, J. H.; Vaughn, W. R.) 24(2)307-312(M/A1985)

Stroboscopy
Computers and strobes (Edgerton, Harold E.) (PC) 24(2)SR036-SR037(M/A1985)
Heterodyne and quasi-heterodyne holographic interferometry (Dandliker, R.; Thalmann, R.) 24(5)824-831(S/O1985)

Sun
Determination of the incident angle of solar rays on a flat surface (Zanker, Adam) (PC) 24(4)SR094-SR096(J/A1985)
Fabrication of optical components for the ultraviolet spectrometer and polarimeter on the Solar Maximum Mission (Spencer, R. S.; Bergen, G. J.; Fleetwood, Charles M.; Herzig, H.; Miner, L.; Rice, S. H.; Smigocki, E.; Woodgate, B. E.; Zaniewski, J. J.) 24(3)548-554(M/J1985)

Surfaces
Calibration and use of optical straightedges in the metrology of precision machines (Estler, W. Tyler) 24(3)372-379(M/J1985)
Differential laser heterodyne micrometrology (Wickramasinghe, H. K.) 24(6)926-929(N/D1985)
Finish characteristics of machined optical surfaces: survey of the (Church, Eugene L.; Takacs, P. Z.) 24(3)396-403(M/J1985)
Holographic contouring using electronic phase measurement (Thalmann, R.; Dandliker, R.) 24(6)930-935(N/D1985)
Measurement of low angle scatter (Stover, John C.; Cady, Fredrick M.; Sklar, Edward) 24(3)404-407(M/J1985)
Measuring roughness of optical surfaces: comparison of techniques for (Bennett, Jean M.) 24(3)380-387(M/J1985)
Mechanical and optical measurements of finish of precision machined optical surfaces: direct comparison of (Church,

Eugene L.; Vorburger, Theodore V.; Wyant, James C.) 24(3)388-395(M/J1985)
Moire deflectometry: a ray deflection approach to optical testing (Kafri, O.; Glatt, I.) 24(6)944-960(N/D1985)
Optical roughness measuring instrument for fine machined surfaces (Brodmann, Rainer; Gerstorfer, Oskar; Thurn, Gerd) 24(3)408-413(M/J1985)
Specification and control of surface finish: empiricism vs dogmatism (Stout, K. J.; Obray, C.; Jungles, J.) 24(3)414-418(M/J1985)
Standardized total integrated scatter measurements of optical surfaces (Detrio, John A.; Miner, Susan M.) 24(3)419-422(M/J1985)
Surface metrology (Vorburger, Theodore V.) (Ed) 24(3)371(M/J1985)
White light method: new sensor for optical evaluation of rough surfaces (Ahlers, R.-J.) 24(3)423-427(M/J1985)

Switches
Long wavelength titanium-doped lithium niobate directional coupler optical switches and switch arrays (McCaughan, L.) 24(2)241-243(M/A1985)
Nonlinear guided wave applications (Seaton, C. T.; Mai, Xu; Stegeman, G. I.; Winful, H. G.) 24(4)593-599(J/A1985)
Optical bistability for optical signal processing and computing (Peyghambarian, N.; Gibbs, H. M.) 24(1)068-073(J/F1985)
Optical computer switching network (Clymer, B.; Collins, Stuart A., Jr.) 24(1)074-081(J/F1985)
Optoelectronic switch matrices: recent developments (MacDonald, R. I.; Lam, D. K. W.) 24(2)220-224(M/A1985)
Optoelectronic Switching Systems in Telecommunications & Computers. By Herbert A. Elion and V. N. Morozov. (Reviewed by Sriram, S.) (BR) 24(1)SR014(J/F1985)
Principles of a switching extensive fiber optic network (Meyrueis, Patrick; Pfeiffer, Pierre) 24(5)869-871(S/O1985)

Telescopes
Coude Auxiliary Telescope: a low cost telescope at European Southern Observatory (Klim, K.; Ziebell, M.) 24(2)363-366(M/A1985)
Design and performance of ranging telescopes: monolithic vs synthetic aperture (Harvey, James E.; MacFarlane, Malcolm J.; Forgham, James L.) 24(1)183-188(J/F1985)

Television
Empirical television sensor performance model (Schmieder, David E.; Wolfe, Burton) 24(5)882-887(S/O1985)

Temperature
Impact of satellite temperature sounding and wind data on numerical weather prediction (Atlas, R.; Kalnay, E.; Halem, M.) 24(2)341-346(M/A1985)
Invasive spectroscopic technique--measuring temperature in highly pressurized combustion chambers (Klingenberg, Guenter 24(4)692-696(J/A1985)
Multiwavelength pyrometry: an improved method (Hunter, Gordon B.; Allemand, Charly D.; Eagar, Thomas W.) 24(6)1081-1085(N/D1985)
Test of jet engine turbine blades by thermography (Ding, Kurt) 24(6)1055-1059(N/D1985)

Thermal imagery
Spatial sharpening of Thematic Mapper data using a multiband approach (Tom, Victor T.; Carlotto, Mark J.; Scholten, Daniel K.) 24(6)1026-1029(N/D1985)

Thermal imaging
Optical design of thermal imaging systems utilizing gradient-index optical materials (Howard, James W.; Ryan-Howard, Danette P.) 24(2)263-266(M/A1985)
Thermal emissivity of diathermanous materials (Munis, R. H.; Marshall, S. J.) 24(5)872-878(S/O1985)

Thermography
Test of jet engine turbine blades by thermography (Ding, Kurt) 24(6)1055-1059(N/D1985)

Thin films
Differential laser heterodyne micrometrology (Wickramasinghe, H. K.) 24(6)926-929(N/D1985)
Low cost high performance antireflective coatings for solar cells (Nakano, H.; Morita, H.; Washida, H.; Kato, T.; Hayashi, S.; Onoe, A.) 24(1)207-212(J/F1985)
Multiple reflection polarizers using dielectric coated metallic mirrors (Thonn, Tracy F.; Azzam, R. M. A.) 24(1)202-206(J/F1985)
Soft x-ray optics using multilayer mirrors (Lee, Ping; Bartlett, Roger J.; Kania, Don R.) 24(1)197-201(J/F1985)

Three dimensions
Achromatic holographic stereogram of Landsat multispectral scanner data (Benton, Stephen A.; Duston-Roberge, D. A.; Simard, R.) 24(2)338-340(M/A1985)
Compensating and measuring any motion of three-dimensional objects in holographic interferometry, new method for (Stimpfling, A.; Smigielski, P.) 24(5)821-823(S/O1985)
Digital fringe reduction techniques applied to measurement of three-dimensional transonic flow fields (Becker, Friedhelm; Yu, Yung H.) 24(3)429-434(M/J1985)
Holographic contouring using electronic phase measurement (Thalmann, R.; Dandliker, R.) 24(6)930-935(N/D1985)
Holographic honeycomb microlens (Cowan, James J.) 24(5)796-802(S/O1985)
Holography applied to inspection and measurement in an industrial environment (Tozer, B. A.; Glanville, R.; Gordon, A. L.; Little, M. J.; Webster, J. M.; Wright, D. G.) 24(5)746-753(S/O1985)
Interactive manipulation of three-dimensional data via two-dimensional display device (Chen, Lih-Shyang; Herman, Gabor T.; Hung, Hsiu-Mei; Levkowitz, Haim; Trivedi, Sushma S.; Udupa, Jayaram K.) 24(5)893-900(S/O1985)
Optical three-dimensional sensing for machine vision (Strand, Timothy C.) 24(1)033-040(J/F1985)
Pulsed laser holography in studies of bone motions and deformations (Pryputniewicz, Ryszard J.) 24(5)832-839(S/O1985)
Simplified static holographic evaluation method omitting the zero-order fringe (Fuzessy, Z.; Wesolowski, P.) 24(6)1023-1025(N/D1985)
Telecentric scanner for three-dimensional sensing (Hausler, G.; Maul, M.) 24(6)978-980(N/D1985)
Three dimensional display based on thick holographic phase components (Bartelt, H.; Streibl, N.) 24(6)1038-1041(N/D1985)
Three-dimensional inspection using multistripe structured light (Jalkio, Jeffrey A.; Kim, Richard C.; Case, Steven K.) 24(6)966-974(N/D1985)
Three-dimensional object representation in imaging systems (Laub, G. A.; Lenz, G.; Reinhardt, Erich R.) 24(5)901-905(S/O1985)
Three-dimensional sensing for inspection (Strand, Timothy C. (Ed) 24(6)925(N/D1985)
Triangulation with expanded range of depth (Bickel, G.; Hausler, G.; Maul, M.) 24(6)975-977(N/D1985)

Tomography
Algebraic reconstruction technique code for tomographic interferometry (Tan, H.; Modarress, D.) 24(3)435-440(M/J1985)
Digital tomography fulcrum height programmer and error correction (DelRio, Patrick; Kruger, Robert A.) 24(3)527-528(M/J1985)
Tomography in image data compression: principles of (Fraser, Donald; Hunt, B. R.; Su, J. C.) 24(2)298-306(M/A1985)

Trademarks
Patent and Trademark Tactics and Practice. By David A. Burge. (Reviewed by Maslow, James E.) (BR) 24(1)SR012-SR013(J/F1985)

Transmission
New molecular transmission band models for LOWTRAN (Pierluissi, Joseph H.; Peng, Gung-Shyong) 24(3)541-547(M/J1985)
Solid state spectral transmissometer and radiometer (Carder, Kendall L.; Steward, R. G.; Payne, P. R.) 24(5)863-868(S/O1985)

Tricks of the trade (FC)
Determination of the incident angle of solar rays on a flat surface (Zanker, Adam) (FC) 24(4)SR094-SR096(J/A1985)
Interference sources in infrared systems operating in closed spaces (Georgopoulos, Chris J.) (FC) 24(3)SR062-SR066(M/J1985)

Turbulence
Aero-optical turbulent boundary layer/shear layer experiment on the KC-135 aircraft revisited (Craig, James E.; Allen, C.) 24(3)446-454(M/J1985)
Effects of aerosols on imaging through the atmosphere: review of spatial frequency and wavelength dependent effects (Kopeika, N. S.) 24(4)707-712(J/A1985)

Ultraviolet
Fabrication of optical components for the ultraviolet

spectrometer and polarimeter on the Solar Maximum Mission (Spencer, R. S.; Bergen, G. J.; Fleetwood, Charles M.; Herzig, H.; Miner, L.; Rice, S. H.; Smigocki, E.; Woodgate, B. E.; Zaniewski, J. J.) 24(3)548-554(M/J1985)

Velocimetry
Automated reduction of instantaneous flow field images (Reynolds, G. A.; Short, M.; Whiffen, M. C.) 24(3)475-479(M/J1985)
Velocities of gases and plasmas from real time holographic interferograms (Deason, V. A.; Reynolds, L. D.; McIlwain, M. E.) 24(5)735-740(S/O1985)

Velocimetry, laser Doppler
Holographic optical system for aberration corrections in laser Doppler velocimetry (Kim, Richard C.; Case, Steven K.; Schock, Harold J.) 24(5)786-790(S/O1985)

Vibration analysis
Mapping of in-plane vibration modes by electronic speckle pattern interferometry (Lokberg, Ole J.) 24(2)356-359(M/A1985)
Time average holography in vibration analysis (Pryputniewicz, Ryszard J.) 24(5)843-848(S/O1985)

Video
Heterodyne and quasi-heterodyne holographic interferometry (Dandliker, R.; Thalmann, R.) 24(5)824-831(S/O1985)
Image processing system to analyze droplet distributions in sprays (Bertollini, Gary P.; Oberdier, Larry M.; Lee, Yong H.) 24(3)464-469(M/J1985)
Pulsed laser holography in studies of bone motions and deformations (Pryputniewicz, Ryszard J.) 24(5)832-839(S/O1985)

Visibility
Effects of aerosols on imaging through the atmosphere: review of spatial frequency and wavelength dependent effects (Kopeika, N. S.) 24(4)707-712(J/A1985)

Vision
Three-dimensional inspection using multistripe structured light (Jalkio, Jeffrey A.; Kim, Richard C.; Case, Steven K.) 24(6)966-974(N/D1985)

Waveguides
Glass waveguides by ion exchange: a review (Findakly, T.) 24(2)244-250(M/A1985)
Integrated lenses on silicon nitride waveguides (Gidon, P.; Valette, S.; Mottier, P.) 24(2)235-240(M/A1985)
Ion implanted optical waveguides in gallium arsenide (Mentzer, M. A.; Hunsperger, R. G.; Sriram, S.; Bartko, J.; Wlodawski, M. S.; Zavada, J. M.; Jenkinson, H. A.) 24(2)225-229(M/A1985)

Weapons
Beam Weapons: the Next Arms Race. By Jeff Hecht. (Reviewed by Lin, Herbert) (BR) 24(6)SR156(N/D1985)

Wind
Impact of satellite temperature sounding and wind data on numerical weather prediction (Atlas, R.; Kalnay, E.; Halem, M.) 24(2)341-346(M/A1985)

Windows
High speed combustion photography with endoscopes in actual diesel engines: a new approach (Werlberger, Peter) 24(6)1045-1048(N/D1985)

X rays
Soft x-ray optics using multilayer mirrors (Lee, Ping; Bartlett, Roger J.; Kania, Don R.) 24(1)197-201(J/F1985)